THE EXPERIENCE OF RECENTLY QUALIFIED SPEECH AND LANGUAGE THERAPISTS IN INTERPROFESSIONAL COLLABORATIVE PRACTICE

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ABSTRACT

Speech and Language Therapy (SLT) is a very small profession that treats people with communication and swallowing disabilities. SLT professionals work in diverse settings alongside a range of other professionals. There has, however, been very little research into the nature of this interprofessional collaboration or the preparation of SLT graduates for such collaboration. In this context, this research aims to examine SLTs' experiences of interprofessional collaborative practice together with their attitudes towards Interprofessional Education (IPE) and its relevance to their existing Interprofessional Collaborative Practice (IPCP). This is an exploratory study that uses the qualitative methodological approach of interpretative phenomenological analysis (IPA). The participants were 21 SLTs who had graduated from the UK's De Montfort University in the previous five years. Semi-structured interviews were conducted to collect data, which were then analysed using Thematic Analysis (TA). Four major themes emerged from the interview data: 1) interprofessional team working, 2) interprofessional communication, 3) how it is feels to be an SLT and 4) IPE. Several subthemes also emerged from data: understanding of interprofessional team working, what makes teams work well, leadership and hierarchy, decision-making, barriers to interprofessional team working, communication types, communication skills, not being understood, what it is like to be an SLT, understanding of IPE, benefits of IPE, what participants learned from IPE, and IPE as preparation for practice. The findings lend valuable insights into IPCP in SLTs' early careers. It clearly illustrates the complex working lives of SLTs moving in and out of different teams with various leadership arrangements. The personalities of a range of professionals and the complexity of their work environments determined the effects on the SLTs' interprofessional relationships and IPCP. This resulted in a need for negotiation and for promotion of their role to other professionals. SLTs felt undervalued and little understood. SLTs also see IPE as important and as a preparation those for IPCP, although it does not necessarily reflect real world conditions. In this scenario, the study examines the implications of this research on pre-registration IPE in SLT and IPCP in the SLTs' current clinical practice.

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Acronyms and Abbreviations

APSEF	Australian Patient Safety Education Framework
CAIPE	UK Centre for the Advancement of Interprofessional Education
CIHC	Canadian Interprofessional Health Collaborative
DHHS	Department of Health and Social Security
DoH	Department of Health, UK
EHE	Enterprise in Higher Education
HCPC	Health Care Professional Council
HEI	Higher Education Institution
GMC	General Medical Council
MBA	Medical Board of Australia
NHS	National Health Service (UK)
IPC	Interprofessional Collaboration
IPE	Interprofessional Education
IPL	Interprofessional Learning
QAA	Quality Assurance Agency
WHO	World Health Organization
UK	United Kingdom
TQM	Total Quality Management
CQI	Continuous Quality Improvement

CHAPTER 1: INTRODUCTION

The first chapter introduces and explains the objective and the research topics, and outlines the purpose of the study. It also provides directions to the key sections of the thesis together with overviews of them, giving a structured layout of the overall research process and explaining how these relate to each other. It further explores the historical, political and policy backgrounds that have produced the current conditions.

The purpose of the thesis: The thesis documents the PhD research process. Each step of the project is recorded and clearly presented to ensure that all of the processes are understood systematically and chronologically. The preparation for this research began in April 2014 and was conducted over a period of three years.

1.1 Introducing the research areas and focusing on a topic

The researcher initially registered as a research student at De Montfort University (DMU) and began working with his original supervisor with the aim of pursuing a topic within the discipline of Speech and Language Therapy (SLT), but without a research plan. After exploring several possible subject areas, he saw himself gravitating towards Interprofessional Education (IPE) and Interprofessional Collobrative Practice (IPCP). Following the retirement of the original supervisor, the author was subsequently transferred to the current supervisory team, where he began identifying certain research goals. Since then he has worked towards acquiring adequate knowledge of relevant research literature. Over time he developed a relationship with the interprofessional education research community both in the UK and internationally, and with the SLT community in the East Midlands in particular and the UK in general. IPCP is a relatively underdeveloped field for research into IPE. Until now it has focused on teams working in acute settings, with special emphasis on better-known professions such as nursing and medicine. Research into IPE is along similar lines: the inclusion of Speech and Language therapists (SLTs) in studies is a rare phenomenon, and little research has been conducted into the outcomes of IPE on practitioners and their work or into the

experiences of recently qualified practitioners working interprofessionally. This study therefore aims to make a new and worthwhile contribution to the existing body of research. Its proposed qualitative methodology is appropriate for a fine-grained exploratory study. The researcher focused specifically on the perspective of SLTs working in the UK.

This is an attempt to make a useful contribution to the body of knowledge, especially when joint initiatives and collaboration are on the national policy agenda for SLTs in the UK. The study does not evaluate the outcomes of IPE. However, it does facilitate a better understanding of how these therapists work by investigating the interprofessional experience of recently qualified therapists. Most of all, the researcher has developed a better understanding of the advantages and disadvantages of qualitative approaches, and has striven to acquire a better understanding of the current literature and to identify relevant themes in order to augment the quality of data collection, analysis and interpretation. The methodology and design of this research is based on research methods seminars at DMU, and from the experiences gained at other workshops and face-to-face sessions relating to methodology and critical writing. The researcher then began working on his methods and methodology according to the research questions. He has elected to use qualitative research methods, which he has mentioned in his formal review panel and other review meetings. The comments he received led him to make a few changes in the methodology he was planning to adopt, as well as to the list of participants in his research. The researcher selected SLT students who had graduated over the last five years from DMU as his participants. The methodology dictated that semi-structured interviews be conducted with the participants. The researcher altered the formal review report as well as the proposal and registration forms according to their comments.

The change in methodology following the formal review process obliged him to write a proposal for the ethics committee incorporating the interview schedule and some information sheets. Based on the comments provided by the committee, the proposal was resubmitted until the committee granted ethical approval. At this point the author

conducted a few practice interviews with SLT colleagues and a pilot study with four voluntary participants. These will be discussed later.

1.2 Research aims and objectives

1) The first aim of this study is to explore the IPP of recently qualified SLTs by investigating their experience, knowledge and roles.
2) The second aim of this study is to explore SLTs' attitudes towards pre-registration IPE, whether IPE relevant or valuable to their current Interprofessional Collaborative Practice (IPCP).

The objectives of this research are to explore the following:

- SLTs' experience of IPCP and IPE
- SLTs' attitudes towards and views of their pre-registration preparation for IPCP
- SLT's knowledge of IPCP and IPE
- the roles assumed by SLTs in various interprofessional contexts
- SLTs' team experiences and roles
- The views of SLTs towards teamwork
- SLTs' experiences of their relationships and the types, barriers and hierarchies involved in communication with other team members

1.3 Justification for the research

Researchers have recently suggested that effective IPCP is difficult to achieve owing to a number of barriers at a systemic, organizational and interpersonal level (D'Amour and Oandasan, 2005). Over the last few decades' students have been explicitly prepared for IPCP with IPE elements added to their curricula to instruct them in current UK working practices. IPCP researchers have frequently focused on teams in acute care or medicine, and health care teams such as surgical teams (Kitto et al., 2013) as opposed to groups such as SLTs. The researcher anticipates that this study will result in a foundation of knowledge being laid in order to better understand SLT in IPE and IPCP. Notably, students SLTs have not been mentioned in IPE-related studies (Robalin, 2011). Until recently, no researcher has been able to demonstrate the benefits of IPE to SLTs during

the early years of their practice, despite the growing importance of teamwork for current policies regarding SLT services. This study's contribution lies in its ability to fill the research gaps and to explore the knowledge, experience and roles of recently qualified SLTs working in various interprofessional contexts. The aim is to provide IPCP and IPE in SLT and those in pre-registration SLT courses with actionable insights into the experiences of recently qualified SLTs working with various teams. The findings will help inform both SLTs' contributions to safe and effectively integrated team working and the pre-registration IPE curriculum. In this way the results of this research study will not only make a significant contribution to the literature, but could also potentially influence policies and practices, bringing about a change in perspective concerning the importance of training SLTs to work effectively within IPCP. The findings will also build on the current body of knowledge around IPE.

1.4 Structure of the thesis: outline of each chapter

The thesis comprises seven chapters, which together present the context, background, purpose and findings of the study. Each part will be summarized succinctly in order to highlight the important points.

1.4.1 Background

The background information includes an overview of the historical and education context of SLT and a summary of current practice. It also provides some crucial information about IPE and IPCP and concludes with an overview of the current health care system in the UK, proposing new policies and structures regarding the nature and effectiveness of IPE.

1.4.2. Literature review

This chapter explains this research's literature review process, discussing the strategy used to search the literature. The body of the chapter review the literature and concludes with a response to the research questions.

1.4.3. Methodology and method

This chapter explores the research methodology using its philosophical, epistemological and ontological historical background's. The methodological framework, study design, sampling, ethics and data collection strategies are also included in this chapter. It focuses on the research methods as well as the main study, and concludes by examining the researcher's reflexivity, quality, validity, reliability and trustworthiness in addition to a conscientious review of researcher bias.

1.4.4. Analysis

This chapter provides an overall explanation of the qualitative data analysis methods and TA before shifting its focus to the utilisation of the qualitative data management software QSR NVivo10 to facilitate the management of interview data. It discusses the role, capacity and limitations of the software in the analysis process, and then explores the data analysis process, organization, management and interpretation of interview data in the process of TA. The chapter finally explains the coding process and the development of themes within hierarchical and theoretical constructs.

1.4.5. Findings

This chapter begins with a framework of themes and subthemes. The researcher has developed these frameworks during the data analysis process to better summarise the essence of this study and its findings. The latter explain how the themes and subthemes come from row data by incorporating some direct quotations.

1.4.6. Discussion

This chapter addresses the research objectives and the questions identified during the literature review. It interprets the findings and discusses them in relation to existing research. The findings are aligned with the existing literature in the literature review process. The response to these research questions is based on the data from which the findings are drawn. The types of finding supported by the existing literature, and those the researcher has shown to be original contributions, characterises all the responses.

1.4.7. Recommendations and Conclusions

This chapter outlines the thesis and concludes with an assessment of the philosophy, methods, methodology and reliability of the current research, along with future research opportunities, and makes recommendations for practice and education.

CHAPTER 2: BACKGROUND

This chapter begins by background the history of SLT and its education. It then provides an overview of the overarching regulations and policies of SLT practice. The second part of this chapter will focus on the history of IPE, along with the policies and barriers that accompany it, before concluding with a discussion of IPCP.

2.1 Speech and language therapy

SLT forms a very small part of health and social care. It deals with remedial measures for people with communication and swallowing disabilities. SLTs work in diverse settings and in close association with parents, caretakers and a wide range of professionals such as occupational therapists, physiotherapists, doctors, nurses and teachers. According to the 2019 Royal College of Speech and Language Therapists (RCSLT) conference, various institutions like the NHS, schools, charities and private practices employ nearly 17,000 SLTs in the UK. They must often work in community health centres, hospital wards, outpatient departments, mainstream and special schools, assessment units and day centres, and sometimes even at clients' residences. In addition, SLTs are sometimes required to work in courtrooms, prisons and young offender institutions. They are involved with the treatment of babies swallowing difficulties, hearing problems, learning difficulties, physical disabilities, language delay, speech and language impairment, stammering, difficulties in producing sounds, voice disorders, cleft palates and autism. Similarly, they are engaged with adult patients who have acquired conditions such as strokes or head injuries, head, neck or throat cancer, voice problems, swallowing difficulties, mental health issues, learning difficulties, physical disabilities, stammering and hearing impairment (RCSLT, 2014). The requirement for them to work with a variety of professionals as a condition of their involvement in such a wide range of professional applications is inescapable.

2.2 Historical Review

In the UK, SLT came into existence in the early 20th century with the emergence of a small professional group of around 8,000 members. However, speech and language disorders go back centuries (van Thal, 1945) and there is data regarding the existence of SLTs as long ago as the 18th century, when language disorders began attracting the interest of health care practitioners (McGovern, 1994). According to Armstrong and Stansfield (1996), the pioneers in SLT were predominantly single females. The Central School established a speech therapy department in 1925; two hospitals in London followed suit and created their own speech therapy departments in subsequent years.

Speech therapy education was recognized in Glasgow in 1928, and was formalised by the Glasgow School of Speech Therapy by 1935. By the late 1930s, graduates from these departments had begun to practice in Britain (Robertson, Kersner and Davies, 1995). Over time subjects such as stuttering, voice disorders, childhood communication disorders, cleft palates and neurological impairments became a topic of study for professionals in these fields (Eldridge, 1968). At the same time, two professional organisations were formed: the Association of Speech Therapists, which represented the artistic field, and the British Society of Speech Therapists, which represented the medical groups of speech therapists. Practice in the field of speech therapy was an integral element of these two groups' professional identities. The two organisations were antagonistic to each other for the majority of their existence (Robertson et al., 1995:10).

In 1945 they eventually agreed to jointly form The College of Speech Therapists (CST). Through the Board of Medical Auxiliaries, the government recognized the CST as a responsible accrediting agency for all qualifying courses. According to the Robbins Report (CHE, 1963) several new course programmes joined the body after its establishment. Two course programmes were recognized in 1945, another five in the 1960s and six more in the 1970s, following the publication of the Quirk Report (DES, 1972).

New courses began to fulfil geographical requirements in southwest England (CSLT Bulletin, 1994). At that time, students were required to qualify for national exams to become professionals. The duration of all courses was three years, inclusive of practical clinical sessions. Many discussions were held regarding the degree of theoretical content that should be included in these courses. At the same time, some professional jealousy as well as perceptual differences became prevalent regarding the academic relevance of these degrees. The CST was apprehensive about the loss of their monopoly and nervous about their prestige and the relevance of diploma and degree courses (CST Bulletin, 1962). According to the Dearing Report (NCIHE, 1997:7-8), the educational structure of SLT has changed rapidly. First recommended in the 1960s by the Robbins Report (CHE, 1963), an increase in the number of SLT students across HE institutions was noted.

2.3 The current system of SLT practice, education and regulation

Three bodies determine SLT practice: the Royal College of Speech and Language Therapy (RCSLT) influences practice and outlines the curriculum guidelines, while the Quality Assurance Agency (QAA) provides benchmark statements for SLT courses along with the Health and Care Professions Council (HCPC), these being the regulatory agencies that set the standards for SLT education and training. The QAA and HCPC collectively focus on the documentation of student/graduate outcomes, whereas the RCSLT provides guidelines on SLT education.

There are two sets of standards. One is that of proficiency and the other of education and training. There are also standards regarding conduct, performance and ethics. The HCPC is the statutory regulatory body for SLTs, and the Health Professions Order 2001 established other professional standards focusing on education and training, conduct, performance and ethics, and proficiency. The college also contributes to the establishment of good practice guidelines alongside the HCPC. With regard to health care courses, subjects are provided in both generic and subject-specific benchmark parts.

In October 2001, SLTs began to register with the HCPC. All HCPC-registered professionals are required to renew their registration every two years so as to comply with the HCPC's CPD standards. According to the RCSLT (2014), the HCPC maintains the registration of health professionals who meet its exacting standards of training, professional skills, behaviour and health. Approximately 180,000 professionals from 16 professional backgrounds are currently registered as members. The HCPC also approves all UK courses requiring graduates to apply for registration, and sets the standards expected from both prospective students and registrants.

In addition to publishing educational and training standards, the HCPC also establishes proficiency standards for SLTs to determine safe and effective practice within the profession. The organisation is additionally entrusted with responsibility for setting the minimum requirements for SLTs' Continuing Professional Development (CPD) and other health care professionals registered with them.

The minimum eligibility criterion for entering the field of SLT is an Honours degree. The HCPC requires therapists to meet the standards of proficiency for registration. The organisation also approves the pre-registration of education courses in SLT so as to make successful graduates eligible to apply for HPC registration. Hence, HCPC registration is mandatory for all SLTs in order to practice in the UK.

Many HE SLT course functions follow the requirements of the semester modular degree system, which offers flexible patterns for learning, combining lectures, seminars and clinical placements for SLT students to give them the perfect blend of training and clinical experience. Furthermore, certain subjects are taught by most institutions as specified in the RCSLT curriculum guidance and HCPC standards in the UK. These include linguistics, phonetics, biomedical sciences, neurology, child development, psychology, audiology, learning disabilities, counselling, acquired disorders, research methods, and evidence-based practice and clinical studies. The HCPC expects courses to meet the RCSLT's curriculum guidance by undertaking at least 150 sessions with 520 hours of placement training before SLT graduation. In placements, students usually work under the supervision of a qualified SLT. Every university has a unique

examination model with which to evaluate SLTs. This education model prepares them for clinical practice. In this case, certain differences exist between the universities and workforce agencies. Prior to this system, both the RCSLT and HE were responsible for formulating course structures and its outcomes. The education and training of the workforce is assumed to be significant and must be carefully addressed by HE institutions and other regulatory bodies.

2.4 Interprofessional Education (IPE)

The IPE movement has expanded rapidly around the world. The present researcher will discuss mainly the UK and Canadian model of IPE and collaboration. However, some sections will provide information on the history of the IPE movement in various contexts. According to Barr et al. (2005:12), "members or students of two or more professions associated with health or social care, are engaged in learning with, from and about each other." Importantly, there has been some discussion of IPE terminology. According to Leathard (1994, 2003) and Reeves et al. (2010a), similar terms have different meanings. Examples include "multidisciplinary," "interdisciplinary," "cross-disciplinary", "teamwork", "partnership", "collaborative relationships", "coordination", "integration", "interprofessionality" and "IPP". In addition, all these terms have been used by health and social care professionals for a number of years. The prefixes "multi-" and "inter-" are often used interchangeably in conjunction with the main words "professional" and "disciplinary" (Oandasan and Reeves, 2005 L23; Leathard, 2003:5). Several of these definitions are explored in Table 2.1. All of them and their corresponding explanations underpin the complexity of their use in literature and policy. Which illustrates the concept of interprofessional terminology. All the explanations, glossaries and definitions have been used throughout the history of health and medical science in the UK. However, before commencing with the policy background, the issues pertaining to working together in public, private and the third sector will be discussed.

In IPE, health and social care professionals cooperatively learn and work together towards a common goal of redefining interprofessional collaboration in order to have a positive influence on the wellbeing of patients and clients. The extensive support and complementation IPE have received reinforces the belief that it facilitates the

development of health care providers and imparts the skills required to work collaboratively (CIHC, 2010; Interprofessional Education Collaborative Expert Panel, 2011). IPE's journey as an educational philosophy has been a long one, and an understanding of this history facilitates an understanding of its present status. Various terms have been used to define IPE, and the literature has adopted several approaches to teaching and learning. Hammick et al (2007) has reviewed this literature and classified the principles of IPE. At a broader level, IPE helps professionals learn about each other and enables them to maximise the benefits of collaboration.

Leathard (1994:5)	**Concept base**	**Multi-inter-trans**
	Process base	Joint planning, joint training, teamwork, partnership, collaboration, cooperation, coordination, participation, collaborative working, joint working, joint learning
	Agency base	Interagency, inter-sectorial, trans-sectorial, consortium, alliance
Rawson (1994:39)	**Problematic association**	Inter/multi/trans
	Focus of operation	Work / teamwork / collaboration / cooperation / integration

Table 2.1 IPE: Definitions and concepts

Table 2.1 shows Leathard's (1994:5) presentation of the three IPE concepts of concept base (multi-, inter- and trans), process base (including joint, partnership and collaborative working) and agency base (including inter-agency, inter-sectoral and trans-sectoral). Rawson (1994:39) gives two explanations, those of problematic association with (inter-multi-trans) and focus of operation with (which includes work, teamwork, collaboration/cooperation). Leathard (1994) and Rawson (1994) present the Interprofessional Learning (IPL) experiences of professionals as individuals or as members of groups. It is these experiences of "learning together" that help professionals disregard their stereotyping tendencies by identifying commonly shared skills and

values. These shared experiences can lead to greater mutual understanding (Clark, 1993). The literature on IPE focuses on the problems of education for those professionals who provide holistic client care, advocating joint education for these professions.

2.4.1 The history of IPE

IPE has steadily grown over the past decade. Notably, research into the mechanisms of learning events continues to advance their understanding by acknowledging their theoretical underpinnings, thereby shaping IPE. In the UK, the first IPE initiatives began in the 1960s. Community, primary, learning disability, mental, aged and palliative care were educational settings unified into a single movement along with a few other fields during the late 1980s, thus paving the way to establishing IPE nationally in the late 1990s. Early work in the interprofessional sector consisted of work-based seminars and short courses to cultivate understanding, trust and collaboration between professions.

In London, Kuenssberg (1966) began interprofessional work with a two-day symposium based on family care. The team aimed to explore working relationships between general practitioners, district nurses and health visitors. The symposium was sponsored by the Royal Colleges of General Practitioners, Midwifery and Nursing, the Queen's Institute of District Nursing, the Health Visitors' Association and the Society of Medical Officers of Health. Similar local and regional workshops and seminars were held, and were approved by both the regulatory and professional bodies. In 1979 some of them eventually organised conferences to support interprofessional developments.

Seminars and workshops also offered opportunities to newly qualified workers to better understand each other’s roles and responsibilities. One example is that of GPs and nurses, who had to overcome problems of isolation and communication in practices in Liverpool (Thomas, 1994). In the 1980s the Health Education Authority (HEA) backed the mounting interest in shared learning with the “traveling circus” of workshops throughout England and Wales in primary health care teams as well as health education. Each team comprised three participants from various professional backgrounds, who

had to work on cervical screening and alcohol, drug and tobacco abuse (Spratley, 1990a). The movement grew more quickly in Scotland than in England. In particular, the social work services group and the NHS management executive commissioned the University of Dundee to facilitate these workshops. In 1989, the NHS, under the Community Care Act, published an inter-agency training program involving the statutory and voluntary sectors in health and social services, a program that offered some long-term solutions and strategies. Pertinently, the NHS training directorate and social services set up a training program with the aim of supporting organisations with appropriate training and by developing organisational structures. Following the implementation of the NHS and Community Care Act, some seven sectors in the English health profession were revised because of shared learning experiences (Carpenter et al., 1991). Though some events describe themselves as interprofessional, they only bring a mixed audience together without giving them the opportunity to increase their mutual understanding (Stevenson, 1995). To that end the Centre for Advanced Interprofessional Education (CAIPE) was launched in 1987, with Dr. John Horder as its first chairman; it supported work-based initiatives with the universities.

2.4.2 The aims, benefits, barriers and outcomes of IPE

Interprofessional approaches to health and social care are linked to improved clinical services and enhanced problem solving (Mitchell et al., 2010). IPE also targets patient-centred health and social care. It entails two types of educational benefit: for students (learning new skills, points of view and practices) and staff (who learn from their students' professional skills and can adapt their training accordingly). Working and learning together can positively affect staff confidence and patient safety alike (WHO, 2010).

Despite all these positive outcomes, however, IPE presents some difficulties that could affect its growth in the health and social care sectors. The problems associated with IPE are usually those of culture, professional identity and accountability versus expectations, clinical responsibility, academic schedules and workloads. Cultural and professional identities are known to have a significant effect on IPE and IPCP. An ideal

IPE model is intertwined with IPL outcomes and activities, with team-based learning activities exhibiting the quality of IPE models. Students can demonstrate their roles, learn from their peers and develop skills to learn and work together by participating in these activities. In addition, learning becomes an interactive, experiential and reflective process. According to Thistlethwaite et al. (2007), this is most effective when the key stages of the learning process attempt to challenge stereotyping and break down hierarchies.

As will be discussed later, the well-documented predicament of hierarchies has been seen as a substantial barrier to the achievement of effective IPCP. Beneficial outcomes include a positive attitude to continued learning, the acquisition of new knowledge and the ability to work with a range of professionals (Freeth et al., 2005). However, these outcomes are by no means guaranteed, owing to the fact that a wide array of other influences such as communication, delivery of care and collaborative working can affect IPE outcomes. IPE can improve the communication and collaborative skills of students and professionals while enabling them to change their attitudes to team leaders (Thistlethwaite et al., 2007). According to Freeth et al. (2005) the efficacy of IPE entails five mechanisms: clinical effectiveness, evidence-based practice, cost-effectiveness, professionalism and ethical practice, and clinical governance. A critical examination of this research however, would point out that these are general issues. Several other factors including patient safety and their understanding of professional roles are excluded. These factors are crucial, since the ability of the patient to understand their care directly affects their wellbeing. Some of these topics will be discussed in the literature review.

2.4.3 Policy on IPE

The improvements in educational models for health and social care professionals has been accelerated by changes within the structure of their education models (WHO, 1985, 1984b). Educational, health and social care education policies influence a variety of sectors such as universities, the NHS and other professional bodies. The journey of interprofessional ideas began mainly with the Centre for the Advancement of

Interprofessional Education (CAIPE), established by academics in 1987. As an authoritative agency, both nationally and internationally, CAIPE has strong links with the *Journal of Interprofessional Care*, which is one of the most prominent academic journals in this area. The UK's Department of Health (DoH) published papers on the subject of interprofessional working and collaborative care, part of the NHS's modernization agenda (DoH, 1989; 1990; 1998). Within the NHS structural models and political, professional, managerial and administrative roles are involved in the development of policy for IPE (Boaden, 1997). Horder (1993), Barr (1992) and Webb (1992) discuss interprofessional theory and its effects on political and economic contexts. The World Health Organisation (1973) states that some policies on interprofessional education and practice relate to the high costs of health and social care and its negative impact on accessing services at a global level.

In the UK, major reforms in health and social care are known to raise controversy among NHS professionals and in public opinion (DOH, 1989b). Since the 1980s, multidisciplinary and multi-agency collaboration has had a strong impact on the planning and delivery of services. In 1992 the government released a White Paper titled *The Health of the Nation*, which provided multidisciplinary solutions and supported multidisciplinary educational systems. Policies on team and multidisciplinary working affected the training of professionals. In the context of IPE, collaborative learning and interaction is a key aspect of group learning, as group members learn about and from each other (Barr, 1994a). This is where the concerned parties

> *...Shall co-operate with one another in order to secure and advance the health and welfare of the people of England and Wales* (Health Act 1999, Part 1, s.27).

On the other hand, Barr et al. (2011:30) advised that pre-registration IPE has always been "subject to separate regulation within each of the professional courses in which it is embedded". In 2006 the QAA published a statement requiring its inclusion at the pre-registration level across professions, educators and their regulators. Similarly, in 2009 the GMC's published version of *Tomorrow's Doctors* emphasised that doctors must understand and respect others, adding that health and social care professionals must also

understand the principle of interdisciplinary learning and working towards the delivery of effective and safe patient care. Needham (2011:14) states

> *A wide range of actors use policy to convey certain meanings, how far meanings are shared, how some meanings come to be dominant and how they shape practice*?

Most recent HCPC standards require IPE in pre-registration courses.

2.4.4 IPE courses and curricula in UK policy on IPE

At the same time, certain universities in the UK hosting CAIPE activities have established IPE courses at postgraduate level. For example, in 1986 Exeter University was one of the first in the UK to offer a multi-professional Masters course in Health and Social Care to a variety of professionals including nurses, physiotherapists, occupational therapists, social workers and other allied health professionals. As already mentioned, a multi-professional approach is not necessarily an interprofessional one. The figure below clearly shows how this learning model works.

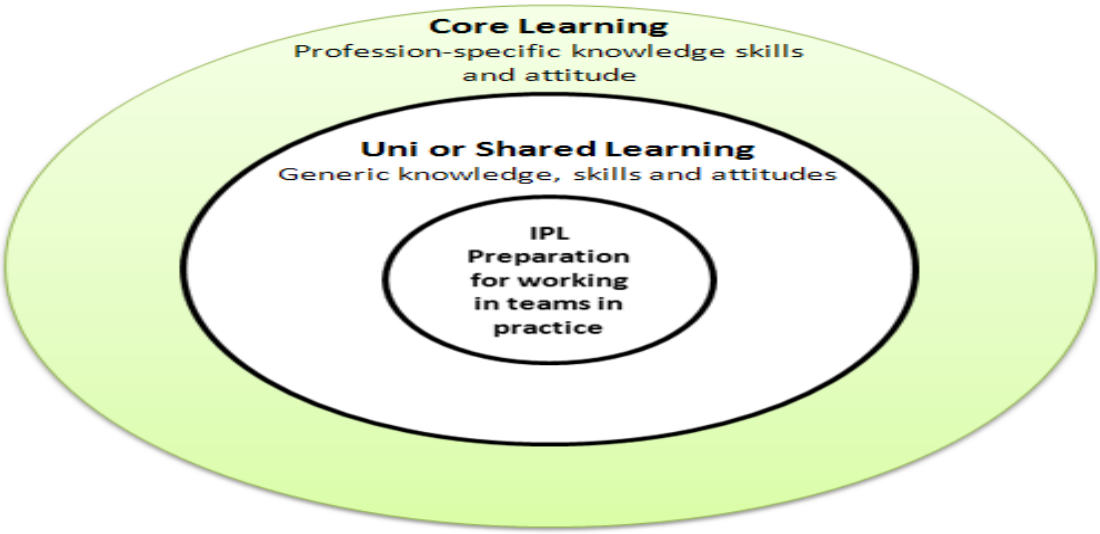


Figure 2.1: Knowledge for IPE and uni-professional education. *Lennox and Anderson (2007:*3)

It demonstrates that shared and common learning is located within the uni-professional curriculum. The outer circle concerns the core profession and specific knowledge, which remains the domain of each uni-professional curriculum. The middle circle represents uni-professional or shared learning, while the inner circle consists of IPL, with preparation for working in teams in practice.

15 UK universities have followed suit and offered Masters Degrees with interprofessional perspectives (Storrie, 1992). However, nearly all of them are based on a single discipline and academic department; only one, at South Bank University, focuses primarily on IPL and working (Gorman, 1995). According to Ross and Southgate (2000), while preparing for two CAIPE workshops in 1996, "shared learning" between medical and nursing students at the qualifying stage catalysed the formation of an academic network. CAIPE furthermore commissioned a nationwide survey that covered topics such as child abuse, teamwork, AIDS, mental health and learning disabilities. The researchers (Shakespeare et al., 1989) identified as many as 695 examples of IPE – two per cent at undergraduate level, 18 per cent at post-graduate level and 83 per cent during subsequent professional development. This has implications for SLT, as it provides the context for concerted consultation between professionals within the purview of effective patient care.

Another survey in 1994 conducted by Barr and Waterton (1996) identified 455 examples of IPE, of which three-quarters were at the post-experience stage. According to the Committee of Vice Chancellors and Principals (CVCP, 1997), 54 of 77 HE institutions in the UK with courses for health professionals offered some "shared learning". Of these, 13 were undergraduate and 30 at both undergraduate and postgraduate levels. According to this data, "shared learning" was more inclusive than "IPE" (Barr 1996:11). This teaching and training gradually improved over time. Higher Education (HE) policy aims to integrate IPE into the pre-registration education of specific professional curricula. However, a variety of challenges exist, including organisation-, faculty- and student-based factors (Reeves et al., 2010b).

For Barr (1996), IPE programs are based on attitudes, perceptions and "collaborative competencies". Collaborative competency will be discussed later. Southampton and Portsmouth universities have created a common learning outlined by O'Hollaron et al. (2006): an IPE curriculum for a diverse range of undergraduate programs. This is known as "The new generation project" and was aimed at providing students with a quality experience in IPL. The model was based on collaborative IPL, in which engaging in-group exercises and building mutual trust and respect across the professions was assumed to be of significance. Within this project a new Interprofessional e-Learning Pathway (IPeLP) was created that offered IPE online. Sheffield Hallam and Sheffield universities also developed an IPL approach to provide a capability framework. This could be a basis for institutions that want to develop their IPE curricula. Internationally, four other competency frameworks could help institutions improve those curricula.

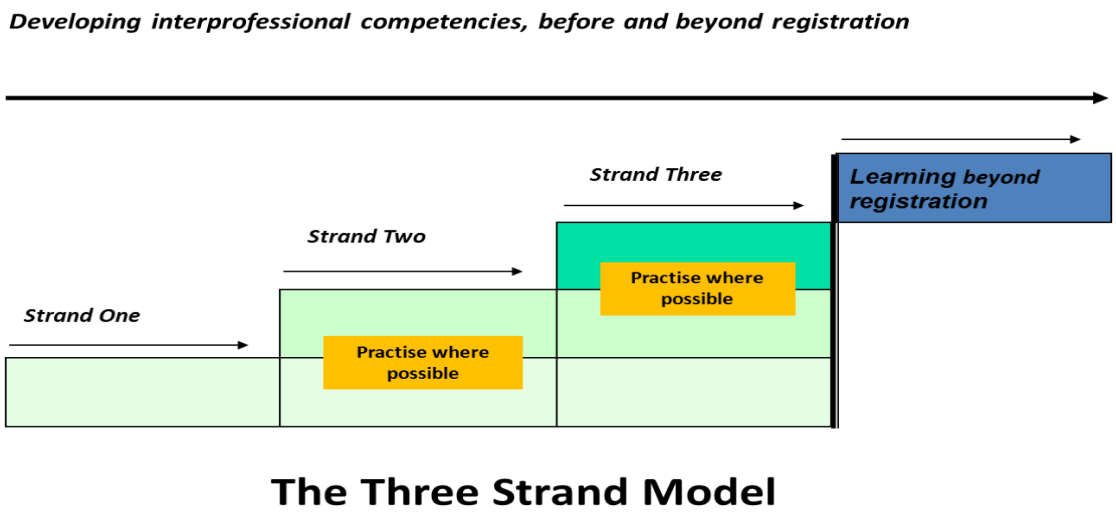


Figure 2.2: Developing interprofessional competencies, before and beyond registration (Anderson and Knight, 2004)

As it mentioned earlier with CAIPE leadership different institution around the UK used IPE in undergraduate and postgraduate level. The Three-Strand Model of Interprofessional Education was implemented in the Leicestershire, Northamptonshire

and Rutland Workforce Development Confederation (Anderson and Knight, 2004). The first strand is a university-based one that involves classroom- and workshop-based IPE activities (these were conducted more than once in each strand). The aim of this strand is to have students learn about themselves and other professionals in relation to promoting person-centred care. The advantages of the second strand are uni-professional knowledge and skills applied to team working in practice. The aim is to familiarise students with the theoretical basis of teamwork and effective collaborative team practice in order to consider their future roles within such teams. The objective of the third strand is to enable students to further develop their knowledge and team-working skills in order to help apply them to current health and social care services while also identifying solutions for effective teamwork.

2.4.5 IPE in Leicester's policy

A three-strand model of IPE is used by some HE institutions in the UK. Curricula using this model are designed to bring all students together for learning and work. The framework of the curriculum is known as the "Three-Strand Model of Interprofessional Education" (Anderson and Knight, 2004). The University of Leicester, DMU and the University of Northampton have used three-strand model IPE curricula (Anderson and Knight, 2004), the aim of which is to bring uni-professional students together in order to learn collaboratively. There is little evidence of IPE in the undergraduate curriculum (Anderson and Lennox, 2009). DMU and the University of Leicester carried out some IPE learning activities together. According to Lennox and Anderson (2012) the Leicester model has some links with the post-qualification period for future professional development.

The IPE module for DMU students is based on the Leicester model of IPE. A typical IPE day could be a half-day or one-day workshop with 20 to 30 students in one room. The workshop facilitators could be IPE-trained in departments related to the students in the workshops. 20 to 30 students are divided into interprofessional teams. The facilitators assign them tasks that could be altered by the workshop subjects. In patient safety workshops, for example, facilitators assign students tasks related to patient safety

such as case studies that involve issues of patient safety. Which students have changes create an interprofessional discussion around the patient safety case.

Every strand has own workshops. Strand One introduces IPE and team-building activities with communication IPE workshops. Strand Two presents challenges in community IPE, while Strand Three involves patient safety and safe practice IPE with patient involvement in the IPE workshop. There are mental health and education IPE days. These events consist of listening workshops that include service user involvement, an IPE introductory workshop that covers team-building activities, and a discussion of complex real-life cases. Patient safety and safe practice workshops also include discussions with other students of real cases from patient safety and safe practice perspectives. Finally, SLTs participate in IPE workshops in the community, and in IPE Education Day workshops with teachers and social workers. Participants in the present research have participated in the IPE workshops by undertaking various activities. The present research presents the students' perspectives while including IPE on the Leicester model. However, there is insufficient data to illustrate how the IPE curriculum affects students during the course of their practice. In this research, the findings are expected to help the SLTs contribute to safe and effective integration, and to improve their interprofessional working. The following section will focus on Interprofessional Collaborative Practice (IPCP).

2.5 Understanding Interprofessional Collaborative Practice (IPCP) in the UK with a historical background and policy overview

IPCP involves health and/or social care professionals who share a team ethos working closely together in an integrated yet independent manner to solve problems and deliver services. IPCP ensures that

> *Multiple health workers from different professional backgrounds work together with patients, families, carers and communities to deliver the highest quality care* (WHO, 2010:55).

The fundamental elements of IPCP are respect, trust, shared decision-making and partnerships (WHO, 2010). D'Amour and Oandasan (2005) indicate that professionals

who have diverse backgrounds are able to disseminate their knowledge, information and goals among themselves by interacting with each other and through interpersonal relationships.

Correspondingly, Petri (2010:80) observes that

> *An interpersonal* process is *characterized by health care professionals from multiple disciplines with shared objectives, decision-making, responsibility, and power working together to solve patient care problems; the process is best attained through an interprofessional education that promotes an atmosphere of mutual trust and respect, effective and open communication, and awareness and acceptance of the roles, skills, and responsibilities of the participating disciplines*.

IPCP's complex nature has not made it easy for institutions and professionals to implement, for several reasons that will be discussed later in this chapter. The theory behind IPCP is very complex, including as it does diverse professional fields and interprofessional backgrounds.

In 1948 the NHS began to use terms such as team working and collaboration. However, the importance of collaboration among health and social care professionals is believed to have originated with the publication of the Beveridge Report in 1942. At that time, team activities among health and social care services faced several problems. Since then, hurdles to the provision of IPCP are being addressed. This can be seen in the growing number of UK publications such as policy reports and regulations relating to IPCP written by a number of professional bodies. Day (2006) chronicles IPCP's policy development thus:

> 1942: the Beveridge Report
> 1948: formation of the NHS
> 1968: the Seebohm Report
> 1978: the WHO's Alma Ata Declaration
> 1989a: *Working for Patients* (DoH)
> 1989b: *Caring for People: Community Care in the Next Decade and*

Beyond (DoH)

The NHS and Community Care Act 1990

1997: *The New NHS, Modern – Dependable* (Secretary of State for Health)

1998a: *Modernising Social Services* (DoH)

1999: *Modernising Government* (National Audit Office)

1999-2005: National Service Frameworks (NSF)

1998b: *A First-Class Service: Quality in the New NHS* (DoH).

1999a: *The Health Act 1999 – Modern Partnerships for People* (DoH)

1999b: *Agenda for Change: Modernising the NHS Pay System* (DoH)

2001b: *The Health and Social Care Act 2001* (DoH)

2001a: *National Service Framework for Older People* (DoH)

2003: *Knowledge and Skills Framework (KSF)* (DoH)

2004b: *The NHS Improvement Plan: Putting People at the Heart of Public Services* (DoH)

2008: Health and Social Care Act 2008

2012: Health and Social Care Act 2012

2014: Children and Families Act 2014

2014: Care Act 2014

All this depicts the importance of IPCP in the context of the UK's policies. These focus mainly on establishing collaboration between professional-carers, patients and professionals in the health and social care sectors. According to Leathard (2003) the patient's socio-economic situation also determines the supportive role of the caring professions. All related professions would indisputably respond to the task of providing support on behalf of their patients, clients and carers. Overall, the main purpose of IPCP is to improve outcomes for patients and learn together by sharing knowledge with other professionals and patients. Learning and working together entails certain shared aspects such as team goals, idea sharing, shared identity and team integration (Day, 2006). These elements set out the "working and learning together" concept that obtains between a range of professionals. This definition also implies that if different professional groups are brought together in a collaborative effort, they are likely to

achieve more as compared to working individually. With regard to supporting professionals working in IPCP, the DoH (1998a:3) states that:

1. At a strategic level, agencies are required to plan together and share information on the use of their resources.
2. At an operational level, ranges of policies are required to demonstrate partnership.
3. At an individual care and support level, a shared information system is necessitated for interprofessional teams and joint training.

2.5.1 The advantages and challenges of IPCP IPE courses and curricula in the UK's policy on IPE

IPCP has several benefits, as noted by McGrath (1991). These include the optimum utilisation of professionals, the encouragement of teamwork and the dissemination of ideas. All these elements can result in a more effective provision of services, thus increasing the efficiency of the health services. A more effective working environment attributed to the development of good working relations can further enhance job satisfaction within the profession, in turn improving the quality of care and patient safety in the system. This may then positively affect the wellbeing of service users, along with other aspects of the health and social care systems. Southill et al. (1995) have verified these positive outcomes, stating that communication between different professional groups, carers, patients and clients increases their awareness of the need for quality and patient-centred care. They point out that communication between professionals, as well as between professionals and their clients, positively affects the quality of care and the utilisation of resources. However, positive outcomes are not limited to patient care. They also result in greater efficiency of resource utilisation in health and social care.

> *Therefore, set against the drawbacks, by the twenty-first century, collaboration has become a powerful force, spearheaded by the government's modernisation programme to further partnership working across the health and social care services.* (Leathard, 2003:9)

However, IPCP also presents certain challenges to its use in the health service sector, one of the main ones being structural tensions between health and social services. Another occurs in team and organisational settings, including a few key factors such as professional issues such as ideological values, self-interest, expertise and diverse professional skill sets (Hardy et al., 1992). The third challenge is the use of complex jargon and varied professional backgrounds and values, which can lead to tensions during collaboration (Pietroni, 1992).

Finally, the issue of economic leadership and organisational boundaries is a serious one (Marshall et al., 1970). However, both Pietroni (1992) and Marshall et al. (1970) state that professional identity can be adapted by including IPE, which can facilitate a more effective form of IPCP despite the challenges involved. The limitations of Hardy et al (1992) research are confined not only to their analytical framework, but also on the differing perspectives of researchers and professionals participating in the study. The social system directly affects interprofessional working relationships, whereas the professional system tends to be influenced by membership of regulatory bodies and the Royal College of Speech and Language Therapy (RCSLT), the Nursing and Midwifery Council (NMC) and the Health Care Professions Council (HCPC). All of them have their own standards and rules, which are not always compatible.

In brief, the organisational structure of IPCP is based on individual team members and the relationships forged between them. Effective teamwork necessitates open communication, support for innovation, high levels of participation, clear roles and responsibilities, competent team members, effective time management, recognition of the intrinsic value of diversity, high levels of commitment, joint education and training, effective conflict resolution, moral support and team spirit. Furthermore, research has shown that effective IPCP is difficult to achieve due to the number of barriers at the systemic, organisational and interpersonal levels.

Farahani et al. (2011) identifies three major themes:

1. A lack of collegiality and communication between nurses and physicians

2. Problematic communication between health-care teams, patients and patients' families
3. Cultural challenges. The findings of this study support the need for health care organisations to be more collaborative and inclusive of nursing professionals.

Other barriers noted by Day (2006) that influence IPCP include a lack of organisational philosophy, ineffective leadership, a paucity of team resources, inadequate communication mechanisms, differences in schedules and professional routines, interaction factors, professional stereotyping, the lack of willingness to collaborate, absence of trust and a lack of communication. Yet these claims are often made by referring to the literature or to limited case study work, with a consequent lack of evidence. According to the relevant literature, there are many problematic aspects of IPCP, including the organisation of the system, considerations of economic difference between professionals, the difficulties professionals face while working together, and the working mechanisms of the system, all of which make these practices unsustainable in the long term. However, these findings often do not draw on empirical studies. They fail effectively to represent the real experiences of professionals' practice of IPCP. The present research seeks to bridge this gap in the literature.

To sum up, while there are some barriers to the effective implementation of IPCP such as various ideological differences between professionals, different values and self-interest, its positive effects cannot be overlooked. These include building closer relationships, positive communication skills, and the sharing of knowledge, experience and ideas regarding individual professions and patient-centred care strategies. Effective IPCP depends on effective IPE and training. The following section will focus on the organizations and systems in which SLTs work.

2.6 Understanding the health care delivery system in the UK

According to the RCSLT (2017) there are some 17,000 practising SLTs in the UK working in a variety of settings such as hospitals, clinics and schools. The NHS employs most. When SLTs graduate, three career paths are open to them. SLTs in independent practice can work in areas such as education, health, social care and the

criminal justice system. In the state sector they can work in a range of settings within the NHS. Schools and community centres can employ their own SLTs. Working in all three settings inevitably results in a degree of complexity.

This section begins by discussing the NHS health care delivery system in order to understand how SLTs are employed there. The UK's NHS is one of the largest health care systems in the world. It was established after the Second World War, on 5th July 1948, after the publication of the Beveridge Report, commissioned by Parliament. The report was the first into social insurance and allied services (Grosios et al., 2010). Aneurin Bevan, a former miner turned politician, who at the time was Minister of Health, founded the NHS on the principle of universality: it was free, based on equity, and resourced from central funding (Delamothe et al., 2010).

The NHS has its own independent structures and organizational forms across the various regions of the UK. The health care system in the UK has two sections, one dealing with strategy, policy and management, the other with actual medical or clinical care. The latter is further divided into primary (e.g. community care, GPs, dentists and pharmacists), secondary (hospital-based care accessed through GP referral) and tertiary (specialist hospitals) care.

The Medical Dictionary (2007) defines health care as

> *The prevention, treatment, and management of illness; and the preservation of mental and physical wellbeing through the services offered by medical and allied health professions* (Medical Dictionary, 2007).

People in the UK seek advice from their GPs when they feel unwell or for their ongoing personal care needs. These GPs refer them to other specialists and professionals if required. In this way, patient or client care is carried out in both the public and the private sectors.

The public sector includes health providers managed and sponsored by the government. Part of the nation's health provision, especially in economic terms, is controlled by government agencies. The primary objective of the DoH is to offer good quality health care services to users. The new system of health and social care is managed by the DoH.

The private sector: This forms the privately owned sector of the economy

> *A part of the free market economy that is made up of companies and organisations that are not owned or controlled by the government* (Goodman et al., 2010:8).

The third sector: This includes non-governmental organisations (NGOs), voluntary and community organisations, charities, social entrepreneurs and other related organisations (Goodman et al., 2010).

There are also a variety of care delivery models, which are discussed in the literature. For example, in the Multi-axial Model of Multi-disciplinary Care the team coordinator, who organises the role for others, is at the centre. In this model, workers across the various professions are required to be linked together (Borril et al., 2000). (See Figure 2.3)

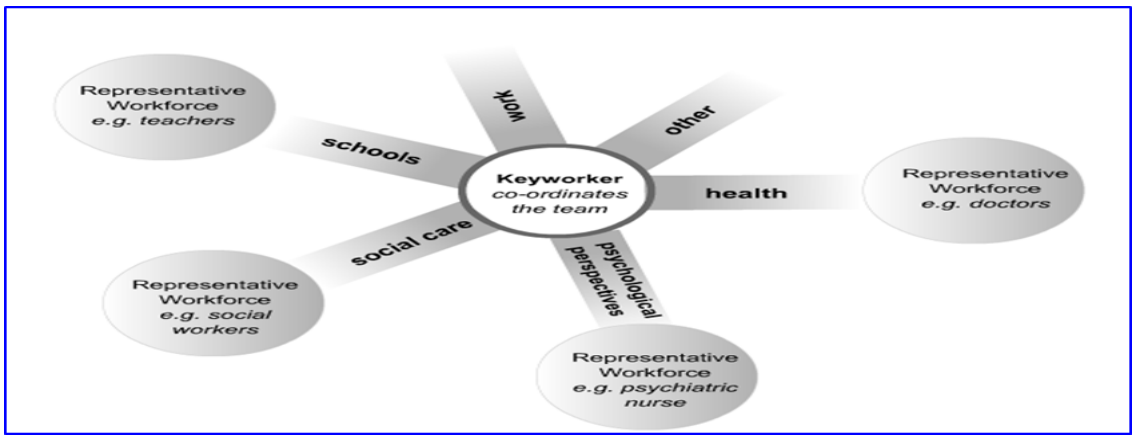


Figure 2.3 Multi-axial model of multi-disciplinary care

Service user-centred models: This type of model places team service users, who can take control of the team and determine its outcomes, at the centre. The childcare team is a good example of this model, as families make decisions regarding the children's' care.

Complex models: Health care team members do not generally conduct face-to-face meetings with each other about their cases. However, professionals in hospitals share interpersonal relations and discuss their cases with each other (Borril et al., 2000).

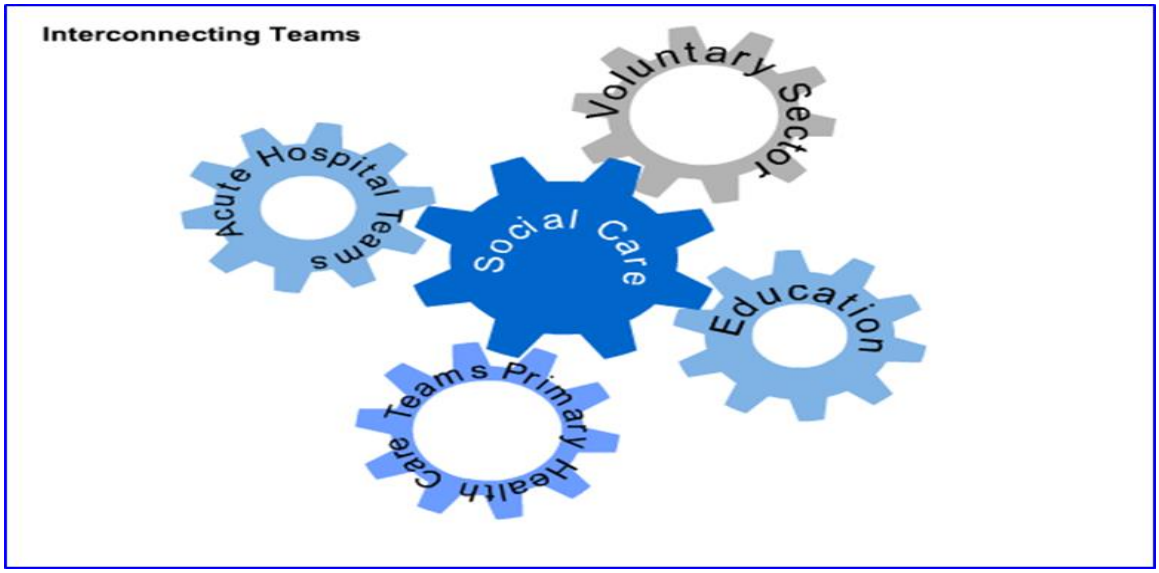


Figure 2.4: İnterconnecting teams

Systems models: Other models take a systems approach to team working – what goes "into" a team, what comes "out" of it and what happens when team members work together. The following is a typical example of this process model (Borril et al., 2000). Local clinical commissioning groups include doctors, nurses and health care professionals who buy services for patients. Health and wellbeing boards bring together all local organisations to work in partnership (gov.uk, 2018). Health care systems changed in April 2013. Doctors and nurses now have more freedom to shape their services, which is helpful for patient needs and quality care. Doctors, nurses and other health care professionals can better judge the kind of support, care and treatment needed at a local level. More emphasis is given to preventing illnesses and enabling people to lead independent lives.

However, this change has affected smaller professions like SLT. The commissioning model has had an impact on the profession, especially in the favouring of dysphagia

over communication services. The purchaser/provider split was also introduced under the Labour government and was subsequently extended. This means that provider organisations could be third or private sector, not just the NHS. This change had significant effects on recent graduates' career paths. Moreover, the National Institute for Health and Care Excellence (NICE) helps professionals learn the best care methods through evidence-based research.

Another organization, the National Institute for Health Research (NIHR) offers networking for health researchers around the world. The Health and Social Care Information Centre supports the health and social care system by collecting, analyzing and publishing data. All these agencies and service providers must make a coordinated effort to permeate the existing system and offer better care. The health care system must also be protected by the monitoring bodies. For example, the Care Quality Commission (CQC) controls the quality and safety of health and social care services in the UK.

The Health Research Authority tries to protect and promote patient interests, while the Medicines and Health care Products Regulatory Agency controls medicines and medical devices, determining those that are safe to use. Finally, the Human Tissue Authority focuses on donated organs and deals with ethical as well as safety issues in organ donation. This is why most health and social care professionals are required to register with their regulatory bodies to help protect patients and monitor them according to professional standards.

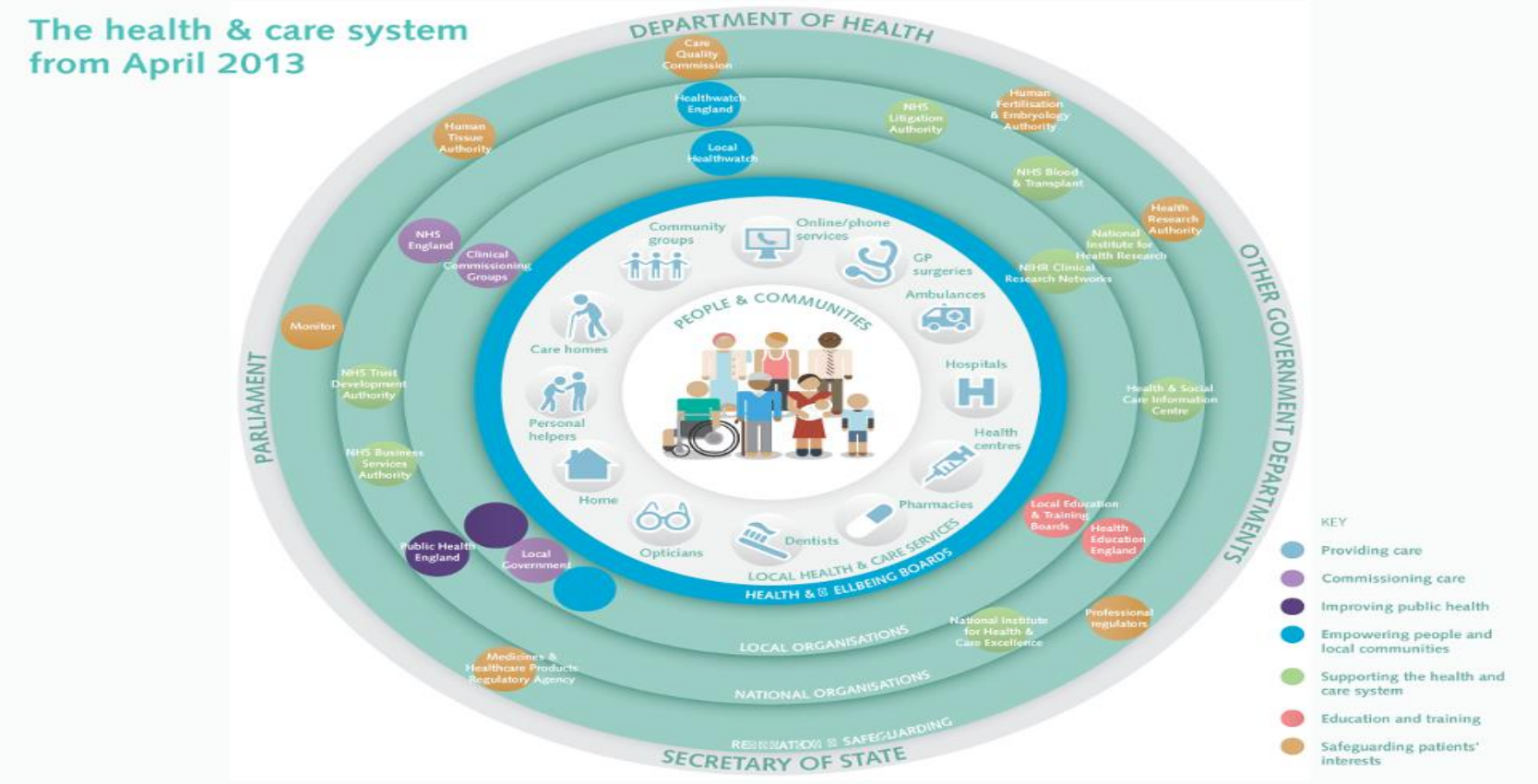


Figure: 2.5: The health & care system from April 2013

Figure 2.5 represents the health care delivery system in the UK as of 2013. The inner circle denotes people and communities. The next level is care homes; health care and social care organisations and hospitals. This is in turn enclosed in the health and wellbeing circle in dark blue. Local and national organisations, registration and safeguarding encompass this, and the outermost level is that of the Secretary of State, Parliament and the DoH. The changes affected in the health care delivery system in 2013 affects SLTs' work settings and contexts. Newly graduated SLTs can now choose either the NHS or the independent sector, working as contractors with health and social care service delivery organizations or in the education sector. This allows them to choose their work settings and career pathways.

2.7 Summary of the chapter

SLT is conducted by a variety of professional and medical specialists who provide the care necessary for individuals whose speech development and organs may be partly affected by various factors ranging from genetic to developmental and psychological effects. The chapter also discussed the different explanation and definitions of IPE, IPCP and their historical and policy backgrounds. Also it has focused on to the current health and social care system in the UK with policy backgrounds.

CHAPTER 3: LITERATURE REVIEW

In this chapter the researcher discusses the theoretical background of this research and further reviews the literature relevant to Interprofessional Collaborative Practice (IPCP), Interprofessional Education (IPE) and Speech and Language Therapy (SLT). In recent years there has been renewed interest in interprofessional working. IPE and IPCP are phenomena of new and increasingly popular health and social care systems. Numerous researchers have demonstrated the benefits of IPCP and IPE for professionals, students and patients.

The review comprises four areas.

1. A description of the strategy used to search the literature.
2. A focus on the general theories related to the area of interprofessionalism.
3. Attention to the theories relevant to IPCP, such as teamwork, team roles, communication types, hierarchies, culture, professional views, identities and workplace. This will help gain a better understanding of IPCP's theoretical background.
4. A review of the literature relevant to IPE and its theory, IPL (IPL), and the model of IPE, using illustrations and explanations.

The following section begins by outlining literature-searching strategies before examining the literature relevant to IPE and IPCP. It then focuses on the relevant theories, and finally investigates IPE and IPCP in SLT.

3.1 Literature search strategy

Before commencing the literature search, the researcher determined the key subjects and themes. The themes of this study include IPCP, IPE and SLT. The limited number of key research areas in the field of IPE, IPCP and SLT dictated the use of strategic searching techniques. Health, collaborative practice, IPE and SLT databases were accessed through DMU's library. The researcher searched CINAHL, Scopus, MEDLINE, ASSIA, and the Cochrane Database for Systematic Reviews, BNI, the National Inter-professional Centre (Nexus), CAIPE and Google Scholar (see Appendix 1). The researcher ran the searches using a combination of the following keywords: interprofessional, interprofessional education, interprofessional collaboration, IPP, SLT, team working, team roles, theory of IPCP and IPE. Combinations of these terms included interprofessional collaborative practice in SLT. The researcher conducted the first literature review in 2014 and updated it on a regular basis, examining new research every month. The keyword combinations used by the researcher narrowed the search down to relevant articles. There are also keywords differences between countries. For example, some countries including the US use terms such as "Speech and Language Pathology" rather than "SLT". Both terms were searched.

The researcher began the research process by conducting an initial literature search, followed by a systematic search of literature published after 2013. Most of the 10,000 articles in this field were published in the mid to late 2000s. The researcher chose to exclude articles published before 2000 with the exception of certain influential ones. The researcher then imported these into EndNote Web and filtered them by relevance. Certain recurring journals were noted, such as the *Journal of Inter-professional Care,* the *Journal of Integrated Care*, and *Medical Education.* The review identified 436 articles on IPE initiatives, 121 regarding attitudes or "readiness" for IPE, 21 systematic reviews on the existing literature and 120 related articles, including ones related to theories associated with IPE or with the relationship between learning theory and IPE. Based on this, the researcher selected articles whose abstracts indicated that they had made a significant contribution to the knowledge base regarding IPE.

3.2 Relevant literature in pre-registration (IPE) and post-registration (IPCP)

Over the past decade students have been explicitly prepared for IPCP by IPE elements in the curriculum to address these challenges. Researchers have identified several problems. The first concerns schedules and calendars, to which 84.7 per cent of participants attested. Other problems include rigid curricula (73.0 per cent), lack of financial resources (69.2 per cent) and lack of perceived value (67.3 per cent). These issues should be addressed by policymakers, as they reduce IPE's effectiveness. Geissler et al. (2002:12) define IPE as involving

> *Members [or students] of two or more professions associated with social or health care, engaged in learning with, from and about each other.*

Among its many objectives, IPE attempts to create holistic health care by empowering a group of professionals to deal with issues that exceed the scope of any one profession. IPE also aims to improve communication and trust amongst professionals, eventually leading to a change in the perceptions and attitudes that members of a discipline may have towards other disciplines (Barr, 2002).

Many beneficial outcomes of clinical IPE for professionals have been noted. Not only does IPE inspire interprofessional communication, it facilitates communication between clinicians from diverse professions by promoting mutual respect and understanding for each other (Geissler et al., 2002). Clinicians have also experienced increased professional and personal confidence and enhanced job satisfaction as a result of IPE (Sinclair, 2004). Furthermore, clinical IPE encourages professionals to participate in reflective practice, whereby they examine their clinical performance and make suitable modifications to strengthen it (Geissler et al., 2002).

All the benefits of clinical IPE result in enhanced quality of patient care and clinical practice. The workplace is presently an environment where the majority of professionals learn about team-based and collaborative approaches to problem solving for patient care (Geissler et al., 2002). While these initiatives have proven to be helpful for collaboration at the post-registration level, more and more institutions are realizing the

advantage of initiating IPL pre-registration. IPE is not currently the main focus in university programs that train future professionals (Geissler et al., 2002).

Students realize that IPE leads to increased knowledge of other disciplines, which in turn generates opportunities for consultation with their members (Geller et al., 2002). IPE also facilitates the development of team-building skills and increases awareness of the social benefits related to cooperation within interprofessional teams (Geller et al., 2002). Of the many benefits of IPE, students observe that its most valuable characteristic is the opportunity it creates to learn about and engage in the group process (Geller et al., 2002).

A systematic review (McNaughton, 2017) of 130 articles relating to IPE practices explored the effectiveness of these practices. The reviewed articles centred on three themes: the impact of IPE on graduate students, the long-term effects of IPE on graduates, and obstacles to these effects. An empirical study conducted on 438 medical, pharmacy, dentistry and optometry students (Singer et al., 2016) shows a greater self-rating of competency in students after IPE sessions, suggesting an improvement in their perceptions of collaborative practices, (Singer, et al., 2016). This suggests that the first year of medical education is the appropriate time to prepare students through IPE, which can include interactive lectures and problem-based learning (Imafuku et al., 2017) Study of first year students asked them to submit reflective essays in order to assess their perspectives on communication, teamwork, roles and responsibilities, both as team members and professionals. The study found that active participation of these students in IPE improved their understanding of the fundamentals of identity formation, communication and teamwork. Reeves et al. (2010) again updated the Cochrane systematic review, proposing that mixed-method studies could provide some clarity for IPE, which affects both practice and patient care. Rodger and Hoffman (2010) surveyed 396 respondents in 42 countries regarding health care outcomes and patient care quality, and health sectors' workforces as regards practice and productivity. Over the past decade, curricular IPE elements have been explicitly used to prepare students to meet these challenges. According to Barr and Low (2012), pre-registration courses occur at various stages in the development of IPE. Several universities in the UK have begun to

implement the IPE program in their medical, health and social care curricula. A 2009 WHO study on IPE synthesized findings from 88 papers published over a 21-year period in order to understanding learning outcomes. The key finding was that when learning plans involved people and lessons from two or more professions, the quality of collaboration and patient care was observed to have been improved. Similarities were found in the learning outcome of students from different disciplines explored in the various studies over the 21-year period. However, some papers revealed that educational interventions do not always result in specific outcomes or fulfil the specific learning objectives for which a program is designed (Thistlethwaite and Moran, 2010)

Several researchers have examined the effectiveness of IPE (Barr et al., 2005; Cooper et al., 2001; Freeth et al., 2002; Hammick et al., 2007; Reeves et al., 2010; Thistlewaite, 2012; Zwarenstein et al., 2000, 2008). However, researchers have also questioned whether it is possible to assess the effect of any one practice on patient outcomes (Kilminster and Zukas, 2007; Pirrie et al., 1999).

To begin to understand the effectiveness of IPE, it is important to note that it can assume many forms. Langton (2009) describes five main types of IPE:

- A shared curriculum
- E-learning alongside other courses
- Insertion of one or more modules into an existing curriculum
- Work-based IPE
- Clinical practice IPE

A given program may be a combination of two or more types. IPE initiatives and learning opportunities may be either formal (planned) or informal (Barr et al, 2005; Freeth et al., 2005). Barr et al. (2005) note that whether IPE programs are voluntary or compulsory also influences engagement. Based on these variations, the term “IPE” can describe several types of scenario as well as initiatives. Only four of the 107 studies of formal IPE in the US, the UK and several European countries evaluated by Barr et al. (2005) involve data collected from staff such as HE teachers or clinical facilitators. Barr et al. also acknowledge the possibility that researchers are more likely to publish

positive results than negative ones. In addition, only 19 per cent of the studies reviewed were at undergraduate level. Hammick et al's (2007) review of four post-registration programs in which IPE programs led to improvements in illness prevention and screening services did not find overwhelming evidence that joint learning contributes to effective collaboration. Cooper et al's (2010) review of 30 qualitative and quantitative studies concerning IPE programs uses a model based on Kirkpatrick's (1967) four-point educational outcomes model to measure the initiatives' effectiveness. Any given interaction affects students' reactions, learning, behavior and results. Many studies reviewed by Cooper et al. are short-term and may provide only anecdotal rather than empirical evidence. However, the results indicate that students' knowledge, beliefs and skills improve, and their attitudes toward interprofessional collaboration become healthy (Cooper et al., 2001). Importantly, Reeves et al's (2008; 2010) reviews mentions some studies that do meet Zwarenstein et als' (2000) criteria. Although the reviewed studies reported positive outcomes for IPE, the heterogeneity of IPE interventions and the small number of studies limited the generalizability of these results. Reeves et al. (2002) highlight the need for further mixed-method studies of IPE and its effects on professional practice. Thistlewaite (2012) reviewed studies of the "context, learning, and research agenda" surrounding IPE, finding that the wide range of activities that may be classified as interprofessional makes it difficult to determine the effectiveness of IPE. Instead, the author reviewed IPE's conceptual underpinnings and the challenges facing those seeking to promote interprofessional development.

In this section, the present researcher has mentioned several authors who have reviewed the literature on IPE. Although many of these report positive results, they recommend further research and point to the need for stronger evidence for IPE's effectiveness. Other researchers have attempted to align IPE to theories of learning in order to justify it as an educational initiative. Academic institutions that offer IPE programs favour pre-qualification assessment that can be transferred to post-qualification level, thus establishing that students' learning can be truly tested (Rogers, Thislethwaite, Anderson, & Dahlgren, 2016).

A post-IPE learning program recorded the responses of 79 learners and found a positive increase in their assessment scores after four months of training. Improvements were also observed in team perceptions of other practitioners (Watts, Lindqvist, Peace, Drachler, & Richardson, 2009). Another similar study of 38 health care professionals using the Points for Interprofessional Education Score (PIPES) after they had been exposed to 16 hours of training found that the attitude scores of practitioners improved after IPE sessions (Delisle, Grymonpre, Whitley, & Wirtzfeld, 2016).

In the aforementioned reviews, understanding of collaborative interactions between professionals in education and business practices was limited and the effects of IPP and IPE on organizational practices as well as behaviour were largely neglected. However, the literature on these subjects has evolved over time. Many interprofessional studies have gathered empirical data on IPE/IPP activities through surveys and interviews. The resulting insights have addressed some concerns in delivering education, such as those concerning professional role assignment, team facilitation and motivation. Studies have to some extent proved the impact of interprofessional intervention on organizational practices and service delivery. The increased use of theory in the development of educational practices has become a trend (Granadoz et al., 2017). The health and social care labour force has currently started to become more collaborative and integrated. As it grows increasingly patient-centric, safe and effective care is interwoven with the increase in complex needs and an aging population. This underpins the need for educating professionals and training providers of academic/professional courses, along with their respective leaders, about interprofessional communication and interprofessional collaboration. This section will focus on the recent research and theoretical background of IPCP.

Interprofessional collaboration is essential for ensuring the ability of health care teams to deliver the highest quality of care. According to the Canadian Interprofessional Health Collaborative program (2010), interprofessional collaboration and collaborative practice are defined as the process of collaboration, coordination and common decision-making between health care teams and clients in all aspects (treatment planning and implementation) in order to reach the determined goal, regardless of the health care

setting or type. The professionals involved, regardless of their specific professional roles, work collaboratively with clients to achieve specific treatment goals. According to D'Amour et al. (2005), practitioners who have been educated in this manner value all the domains and practice interventions of other fields. Not only do these professionals employ clinical interpretation within their own practice; they are also responsive to how each discipline is inextricable with the continuum of overall client care (D'Amour et al. 2005). Knowledge of various domains and their practices in diverse fields allows appropriate referrals to be made and lays down the basis for collaborative practice in health care.

Interprofessional collaboration is therefore fundamental to the fields of health care and education for numerous reasons. When health professionals and other agencies understand the roles and responsibilities of members in treatment teams, the outcomes are usually positive (D'Amour et al., 2005), and may include an increase in proper referrals, appropriate preparation for discharge, improved staff retention rates, increased institutional supports, smoother agreement as well as coordination on health services and discharge planning, comfortable work environments and a sense of value and respect for other team members. It could be a prototype for interagency collaboration and interprofessional collaboration, especially between different educational, health care and language therapy specialists. The negative aspects of care, such as medical complications and errors, health care costs, duplications in medical testing, durations of stays within health care facilities and underlying tensions within health care teams, may also be reduced by improved Interprofessional Collaboration, (WHO, 2010; Sandberg, 2010). These outcomes explain why the US's Health Resources and Services Administration (HRSA) instituted a coordinating centre for Interprofessional Collaboration and Education to prepare for the Affordable Care Act.

> *Health care delivered by well-functioning harmonized teams leads to better family and patient outcomes, more resourceful health care services, and higher levels of satisfaction among health care providers* (US Department of Health and Human Services, 2012).

Although many professionals endeavour to positively affect client care through collaboration, they usually struggle with balancing independence and autonomy on the one hand and maintaining the interests of practitioners' specific disciplines on the other. The development of collaborative practice is expensive and takes time, according to D'Amour et al. (2008). Interprofessional education and training must therefore be accorded priority to ensure that all team members understand each other's roles, responsibilities and domains. Connolly et al. (2010) affirms that educators must develop a specific curriculum if this education occurs within a formal setting. Specific procedures and protocols must be institutionally developed, appropriate lengths of time must be allocated to team collaboration and communication, and infrastructural development must be systematic in order to support interprofessional collaboration (Lawson, 2004).

The WHO Framework for Action on Interprofessional Education and Collaborative Practice (2010) outlines many elements essential to the promotion of interprofessional collaboration, some of which are the approval of collaborative practice in supportive management and workplace culture, and legislation that allows it. Other necessary factors mentioned in the WHO Framework are a working environment that allocates the time necessary for collaboration and team meetings, the development of workplace policies concerning professional collaborative practice, and government legislation that supports interprofessional collaboration and education. Current research on interdisciplinary collaboration shows that not all health care facilities have all the elements in place to support collaborative practice. According to Connolly et al. (2010), the lack of time allotted to adequate team collaboration and wholesome IPE may lead to misunderstandings based on ambiguities surrounding the responsibilities of specific disciplines within the health care industry. Zwarenstein et al. (2000) conducted a Cochrane review to determine "the usefulness of IPE interventions compared to education in which the same professions were learning different things from one another." Following an extensive search, Zwarensteinet al. (2000) found that none of the 1,042 studies he identified (of which 89 were given closer consideration) met his inclusion criteria of

> *Randomized Controlled Trials (RCT), controlled before and after studies and interrupted time series studies of IPE interventions designed to improve collaborative practice between health/social care practitioners and/or the health wellbeing of patients/clients* (p.125)

There is consequently a lack of thorough quantitative evidence regarding the key factors influencing the effectiveness of IPE. However, this does not imply any evidence of "ineffectiveness" (Zwarenstein et al., 2005:154). Analogously, Munro, Felton, and McIntosh (2002) include publications from the past two years in research design, with the results corroborating the findings of Zwarenstein and Reeves (2000). Despite these findings, Zwarenstein and Reeves (2000) note that

> *Nevertheless, planners continue to advocate, and endorse, joint training between different groups of workers with the objective of producing an integrated workforce of multi-disciplinary teams*.

Munro et al. (2002) maintain that those responsible for educating health care professionals must "demonstrate its superiority over separate learning experiences" (p.799). However, this is an onerous task, as it is resource-intensive (Gilbert, 2005). Reeves et al. (2010) meanwhile updated the findings of the Cochrane systematic review, which suggest that mixed methods are required when researching IPE given that they offer greater clarity regarding its effects on professional practice and the care of service users.

Long-term studies should also cover learning routes along with the transfer of learning into sustained post-qualification practice. Most of the literature in area of SLT involves teacher-SLT relationships and team working. Collaboration may also be difficult to achieve due to underlying differences in education and health service structures and systems. McCartney (1999) suggests that, given such radically different systems, it is surprising that effective collaboration occurs as often as it does. This may seem to be a positive condition, but it is important to take the rates and patterns of such collaboration into account in order to find ways of promoting a more systematic and formal

collaborative approach between professionals, health providers and education providers and their organisations. Communication should not be a random and a spontaneous process whose occurrence is subject to whim. It must be a formally structured and generic practice. Reid and Farmer (2001) note that the divergent responsibility of SLTs and teachers contributes to ineffective collaboration. For example, SLTs' and teachers' working hours and in some cases holidays are different. Moreover, teachers may view SLTs as outsiders or visitors to the school (McCartney, 1999). Therefore, if management realizes that the process of Interprofessional Communication is deficient, or that the uncommunicative working conditions are an impediment, they must mandate communication between their personnel service and providers as the norm.

In the context of education, McCartney (1999) reviews an extensive collection of the barriers to SLT and teacher collaboration, noting that the biggest difference between these two professions is the intended service recipient. SLTs and other health service workers only operate when there is a specific need, whereas teachers must actively and continually contribute to children's 11 years of schooling. As a result, SLTs must prioritize and ration their services for those individuals who most need their services. This could explain why communication between professional service providers appears to be impeded in most cases.

McCartney also reports that these professions differ in how they help children learn. SLTs seek to resolve learning difficulties at an individual level, whereas teachers deal with the general educational environment in order to improve learning. Lindsay et al. (2002) hold that a compulsory interagency communication and collaboration framework would be a desirable tool in such a context. Some researchers have used a wide range of designs, varied types and sizes of sampling and different interpretations of collaboration to examine the collaboration between teachers and SLTs. For example Lindsay et al. (2002) used the responses to a mailed questionnaire, while Cross et al. (2010) analysed the perceptions of all the professionals working with a particular child.

Other research focusing on the use of IPCP among osteopathy practitioners is very limited. A study of osteopaths and paediatricians from Quebec in Canada (Morin,

Desrosiers, & Gadboury, 2017) explores the facilitators of and inhibiters to the adoption of IPCP. Using IPCP, the study finds that positive clinical results, previous training provided to professionals, the perceived safety of medical practice and requests for collaboration from patients and parents are the key enablers of IPCP. Barriers include legal contexts, common language, and uncertainty of role, limited evidence of its application and the lack of interprofessional interaction. These insights can guide the development of strategies to promote the use of IPCP in the practice of osteopathy. This section has discussed the relevant literature. The following section will focus on the relevant theories in pre- and post-registration IPCP.

3.3 Relevant theories on Pre-registration IPE and Post-registration IPCP

In recent years, interest in the use of theory in the interprofessional field has grown. Barr et al. (2005) posit that a firm theoretical base allows IPE to evolve rapidly. Numerous theoretical perspectives from a variety of academic disciplines have been introduced into IPE (Barr et al 2005 p12) state that

> *Many theoretical perspectives have the potential to guide the development of Interprofessional Education and to aid a greater understanding of IPL.*

A number of other theories have also had a great impact on the body of knowledge regarding IPE. For example, Zwarenstein and Reeves' (2000) Cochrane review seeks to determine "the usefulness of IPE interventions compared to education in which the same professions were learning separately from one another." Some theories apply directly to the field, while others indirectly affect it. The main aim of this review is to describe those theories across a range of disciplines that guide IPE and IPCP. The review will begin by defining theories, followed by outlining them in relation to the interprofessional field. Revees (2007) explore 17 theories, of which only nine were useful. However, the remainder was also potentially applicable, as they can expand the educational evidence base, thereby supporting learning practice. This section will introduce educational and learning theories first, then those relating to practice and social science.

3.3.1 Learning theories

Kaufman (2003) suggests that six learning theories are related to IPE: social cognitive, reflective practitioner, transformative learning, and self-directed learning, experimental and learning. Barr et al. (2013) recommend that interprofessional initiatives should be tested "against…other theories, which may confirm or conflict" with them (p.7). Hean et al. (2013) and Hammick et al. (2007) reiterate the importance of theory and pedagogy to IPE's evidence base, exploring IPE through a sociocultural lens.

Several researchers have attempted to align IPE with existing learning theories. Curran et al. (2010) state "constructivist learning theory has important implications for the design of classroom-based IPE," because it includes the tenet that learning requires interaction and dialogue. Case-based and problem-based learning (CBL and PBL) "draw upon real-life clinical problems" in order to promote experiential and self-directed learning (Wilhelmsson et al., 2009:124). Similarly, D'Eon (2005) suggests that IPE and PBL learning situations promote effective teamwork through real-life contexts. D'Eon also observes that progressively increasing the complexity of practice cases enhances students' ability to transfer their learning to real-life circumstances. Such an approach would require an extended implementation of IPE, as opposed to "one-off" sessions or optional extras. Another study (Anderson, Smith, & Hammick, 2015) exploring the evaluation framework for IPE involving undergraduate programs comprehensively outlines the process of evaluation, but still lacks insights into the application of theories to the enhancement of learning. The study highlights some cyclical issues faced by students related to facilitator abilities and student experiences. One inference from this study is the need to make theory-based lesson plans, which are still lacking in some IPE practices.

A study demonstrating the use of theories in the development of IPE (Hean, et al., 2018) shows that these theories are mostly used to design learning activities and for evaluation. However, elements of interpersonal curricula are still under-theorised. There is thus a need to review theories and deploy them in designing and delivering suitable IPE curricula. Some adult learning theories are also discussed in the literature.

Researchers including Barrows and Tamblyn (1980), Kolb (1984), Knowles (1975), Lave and Wenger (1991) and Schön (1983) have conducted research on areas surrounding learning. Clark (2006) suggests that IPE practitioners should use structured programs and courses, appropriate learning objectives and effective teaching methods. Barr et al. (2005) and D'Amour and Oandasan (2005) point out that the use of reflective learning theories is important in interprofessional activities and learning. Barr (2002) suggests that the challenge of IPE is targeting outcomes, which also affects outcomes for the service users of health care systems. According to Thistlethwaite and Moran (2010), the outcomes for IPE include teamwork, negotiation, decision-making, reflection and patient safety. The type of learning needed to meet these objectives can be covered under Barr's (1996) five categories of interactive learning: observation-based, exchange-based, action-based, simulation-based and practice-based. Following an extensive search, the researchers concluded that despite identifying 1,042 studies (of which 89 were given closer consideration), none met the following inclusion criteria:

> *Randomized Controlled Trials (RCT), controlled before and after studies and interrupted time series studies of IPE interventions designed to improve collaborative practice between health/social care practitioners and/or the health/well-being of patients/clients.* (p.1)

In this review, the authors did not find any quantitative evidence for the effectiveness of IPE, and only some qualitative evidence, although this does not mean that evidence for the efficacy of IPE is weak. Zwarenstein and Reeves (2000) maintain that studies in IPE generally focus on the work of various groups and multi-disciplinary teams. Munro et al. (2002:799) speculates that those responsible for educating health care professionals should "demonstrate its superiority over separate learning experiences". The application of many of these theories is to help underpin the development of curricula or explain empirical findings from an interprofessional study. For example, many have used the contact hypothesis to underpin the development of interprofessional curricula (e.g. Carpenter, 1995).

3.3.2 Social Psychology theories

Allport (1954) proposed social psychology theories that describe the tension between group members. Groups require equality, common goals and cooperation. Jains (1982) and Tuckman and Jensen (1977) developed Group Thinking Theory. Social Exchange Theory (Challis et al. 1988), Cooperation Theory (Axelrod, 1984), Relational Awareness Theory (Drinka et al., 1996) and Team Reflexivity Theory (West, 1996), all of which assume significance in the field of interprofessional collaboration. Hind et al. (2003) employed three social psychology theories: Realistic Conflict Theory (Brown et al., 1986), Social Identity Theory (Ellemers et al., 1999) and Self-Categorization Theory (Turner, 1999). According to Reeves et al. (2007), Discourse Theory describes culture and language. Foucault's (1972; 1979) theories of social power, discourse and surveillance have also been used in the interprofessional literature. These exhibit the implications of bureaucratic organizational structures and the power of interprofessional Communication. Koppel (2003) argues that discourse and surveillance theories contribute to understanding the environmental impact on education of health care professionals.

Goffman's (1963) theory of Self-Presentation and Strauss' (1978) negotiated order perspective explains an organization's social order, whereby individuals shape the organization's culture as well as its rules. French and Raven's (1959) Power and Influence Theory describe the degree and nature of power used by leaders and how this affects individuals, both inside and outside organizations.

> *Hind et al. (2003) have drawn on three social psychology theories, realistic conflict theory (Brown et al. 1986), social identity theory (Ellemers et al. 1999) and self-categorisation theory (Turner, 1999), to inform the development of their interprofessional initiative for pre-qualification students from five different professional groups. Furthermore, Ginsburg & Tregunno (2005) drew upon social learning theory (Bandura & Cervone 1983) to help inform their analysis of the role of interprofessional education and collaboration within an organizational change context.* (Reeves at al., 2007:8)

There is also research on leadership, hierarchy and professional relationships. Freidson's (1970) Professionalization Theory describes the knowledge and expertise of occupational group members.

3.3.3 System theories

Researchers often use system theories in the natural and social sciences. In the interprofessional field, Barr et al. (2005) argue that the interaction between professionals in a system, such as that between doctors and nurses, will affect multi-professional perspectives. Cooper et al. (2004) suggest that it is necessary to use complex theories in this field in order to understand the complex nature of an IPE context. Correspondingly, Reeves and Freeth (2002) cite Biggs' (1993) 3P model of developing IPE, which includes the intervention's process and products. Reeves and Freeth (2002) used this model for interprofessional intervention within community mental health teams. They found a number of factors such as government policies, negative stereotypes, process factors and products (IPL outcomes).

Engestrom et al. (1999) formulated Activity Theory, which affects interprofessional and inter-agency relations at both micro and macro levels, and developed Vygotsky's model of mediation into a triangle of individual relationships between the subject, the object and the mediating artefact. Various studies (Barnes and Turner, 2001; Kennedy and Steward, 2012) have examined the collaborative relationship between teachers and occupational therapists. Teacher participants have reported frustration at not having formal collaborative meetings with occupational therapists (Barnes and Turner, 2001). Nevertheless, teacher participants understand that occupational therapists' high caseloads make it difficult to schedule regular meetings (Barnes and Turner, 2001). Some teacher participants report that informal collaborative interactions such as talking in the corridor has an importance for teachers and occupational therapists as a means of collaboration as well as for teachers to express their concerns about students (Barnes and Turner, 2001).

The occupational therapists who participated reported a need to increase collaboration with teachers (Kennedy and Stewart, 2012). Equally, effective collaboration was found to be predicated on the basis of numerous factors such as understanding teamwork, improving interpersonal skills between the two professions, clarifying the role of occupational therapists in the classroom and holding regular meetings with teachers (Kennedy and Steward, 2012). The use of theories in IPL is very limited; however, they are critical for advances in the field. Organizational and system theories have not been understood sufficiently.

3.3.4 Psychodynamic theory

Marris (1986) used psychodynamic theory to describe loss and change. Holman and Jackson (2001) incorporated Marris' theory in their study involving seven interprofessional workshops for staff caring for older adults. They found that interprofessional communication had a powerful effect on social care. At the same time the dynamics of team members and teams had a strong effect on interprofessional collaboration. Barr et al. (2005) state that Social Defence Theory (Menzies, 1970) and Work-Group Mentality Theory (Bion, 1961) have potential for IPE and IPCP.

3.3.5 Organizational theories

Organizational theories describe how individuals work and learn together in order to improve the products or services they provide.

> *There are micro level (individual level), meso (organizational level) and macro (socio-cultural and political level) that influence the success of IPE.* (Oandasan and Reeves, 2005:7)

Along with their potential contribution to IPE and interprofessional system and education theories, CQI (Continuous Quality Improvement) and TQM (Total Quality Management) have a range of models and ideas that can find application in IPCP and IPE. Given the richness of the theories discussed in Reeves at al. (2007), the authors advocate that a range of IPP and education issues, and arguably the future development

and implementation of interprofessional activities, could be informed by one of these diverse theoretical perspectives (p.6).

The use and understanding of such theories is vital for IPE. This is because organisational cultures and structures have some negative effects on interprofessional communication. Researchers have suggested that psychological, sociological, adult learning, systems, psychodynamics and organisational theories can contribute to IPP. Such theories can apply to both the educational and practical sides of the interprofessional and SLT fields.

> *Organizational theory encapsulates a range of perspectives from economics, psychology and sociology…. Implementation theory would seem another fitting theory that may help explain how individual, professional and organizational motivation and commitment can affect interprofessional collaboration.* (Suter et al., 2013:16)

3.3.6 Interprofessional team working theories

Recent evidence has suggested that team working in health and social care is crucially important to the quality of care and patient safety. The concept of teams and team working in the interprofessional literature is common.

> *Service improvement in the workplace serves as a new vehicle through which individual professionals and teams can continually enhance patient care through working and learning together*. (Wilcock et al., 2009:12).

However, the definition of teams and team working is inconsistent (Day, 2006). For example, Pritchard and Pritchard (1994) describe a team as

> *A small number of people with complementary skills who are committed to a common purpose, performance goals, and approach for which they hold themselves mutually accountable.* (p.13).

For Katzenbach and Smith (1993), a team is "a group of people who make different contributions towards the achievement of a common goal" (p.45).

On this note, Tuckman and Jenson (1977) posit five stages of team development: formative, storming, forming, performing and adjourning. Day (2006) discusses these stages in greater detail. In the formative stage, health and social care team members get to know each other. In the storming stage, team members test each other in order to understand each other's roles and responsibilities. In the formation stage, team members formulate their team ideas and team knowledge. During the performing stage, team members communicate well and are productive. In the final step, the team attains its aims and objectivities successfully.

This five-stage model can be used for health and social cares teams. According to Hackman (1983), five factors affect team performance. These are team directions, structure, and communication between team members, the team's organisational context, and the sharing of teamwork. The SLT literature contains few mentions of team performance and the factors affecting it. However, some researchers have mentioned specific SLT teams such as dysphagia or voice teams. For example, Boaden et al. (2006) describe the outcomes of an interprofessional team for dysphagia. However, no studies have specifically addressed the importance of teamwork in such teams.

Andrea et al. (2010) assigned 1,000 University of Toronto health science students including SLTs to introductory IPE sessions. These workshops sought to improve the students' understanding of the patients' perspectives, as well as the roles and responsibilities of other professionals. The researchers used mixed methods with a pre- and post-research design through which they examined the students' perceptions and attitudes before and after the IPE sessions. They also sought to understand the pedagogic efficacy of large-scale IPE sessions. The results reveal that a large number of students considered teamwork as an essential element. A limitation of this study was that the researchers conducted only a few workshops, which does not accurately reflect the effects of IPE and interprofessional communication.

Researchers have generally focused on the outcomes of therapies, as opposed to team effectiveness. For example, Gardner (2006) suggests that collaborative SLT sessions with SLTs, parents and school support assistants positively influence the therapy's

outcomes. However, the researcher focused only on therapeutic outcomes without mentioning the effects of collaborative team efforts. So far, there has been little discussion regarding teamwork in SLT. The present researcher aims to explore the perspectives of SLTs concerning different settings of interprofessional collaboration.

Fox et al. (2016) suggest that teamwork training must begin at the early developmental stage. They reviewed 1,106 abstracts on effective strategies for pedagogy and assessment, and also used the inclusion of students as the eligibility criteria for improvement of interprofessional teams. 33 of those studies were found to meet the inclusion criteria. Earlier literature on IPE largely varies with regard to focus on study design, teaching methods and assessment measures. However, there are not enough comparable studies of sufficient quality that can be used to identify teaching or assessment methods.

Reeves et al. (2010) observe that the definition of "interprofessional" is predicated on the practices of teamwork, collaboration, coordination and networking. Furthermore, an interprofessional team focuses on activities, interaction and shared responsibilities. On the other hand, collaboration is focused on a shared identity and integration, which are not as important to interprofessional working (Reeves et al., 2010). Coordination is a form of interprofessional work with the component of shared identity. Reeves at al. (2010) propose that relational, procession; organisational and contextual factors affect interprofessional teams. Relational factors are described as the relationship between professionals, while process factors involve workplace, space and time, organisational factors describe the local organisational environment, and contextual factors include social, economic and political elements.

Of these, relational factors have the greatest effect on a team's effectiveness. According to Oandasan et al. (2009), a workplace's space, time and physical layout all affect an interprofessional team. Davies et al. (2011) maintain the placement setting as a critical factor for exploring the final-year physiotherapy students' perspectives and experiences regarding IPL. The use of collaborative team-based IPE was also mandated in 2013 for the mental health care sector by the US Veterans Health Administration. The

collaborative care model thus guided frontline clinic staff practices (Shoham et al., 2016) semi-structured interviews conducted with 14 members of staff revealed that the implementation of IPE care teams was strengthened by their collaborative efforts, which also enhanced their learning experiences. The study found four recurring themes when exploring the process of collaboration and clinical handling: workplace navigation, organisational structure, professional growth, and relationships and patient care delivery using available resources. These themes can be useful in exploring the areas that need attention while designing an IPE program for educating health care students (Dallaghan et al., 2016). Interprofessional working theories have been discussed in this section. It is clearly shown that the gaps in the literature concerning SLT and IPCP relate to interprofessional SLT teams. A search of the literature reveals very few studies that mention IPP in the context of SLT.

3.3.7 Team role theories

Katzenbach and Smith (1993) describe various types of team with various performance levels. According to the authors, working groups help each other by using their professional ties, pseudo-teams do not have common team goals, potential teams know what they need to do and work towards a common goal, real teams include small numbers of people with common goals and responsibilities, and high-performance teams are characterized by some differences. According to Benne and Skeats (1948, cited in Payne, 2000), three important factors are known to affect team roles: the behaviour of the team members, the skills of the members, and their helpful or unhelpful roles. The behaviours of team members are important for the quality of communication with each other. Individually, the professionals' perceptions of their role, whether helpful or unhelpful, impacts their satisfaction and performance. Selle et al. (2008) designed a study at the Liberal Arts College in America that focused on interprofessional teams. The participants in this research included students in nursing, physical therapy, social work and special education. The results show that dissociation and role-playing positively affected the students' interprofessional team meetings. The students' status as observers or non-observers, as well as their level of professional preparation, affected their interprofessional team roles. Belbin (1981) posits nine types

of role that fall into the three main categories of action-oriented, people-oriented and cerebral roles. According to Day (2006), Belbin's ideas are good for explaining team roles. However, they are not useful for team building. Mixed professional teams are also known to have positive effects on health and social care outcomes, but there is a need for professionals to work and learn together. Day (2006) further asserts that a combination of professionals addressing team requirements must be used to meet the individual needs of patients. For example, a voice disorder team could consist of SLTs and ENTs, but is unlikely to include cardiovascular professionals. Kaasalainen et al. (2010) confirms that strong interprofessional collaborative relations facilitate a beneficial model of care.

In manager-contracted teams the team buys services from professional management services. In a hybrid management team the manager coordinates with the core staff, while another manager is responsible for other team members. According to Dobson et al. (2009), clinical and managerial activity is important for pharmacy teams. Day (2006) suggests that effective interprofessional teams must have clear goals, open communication, support for innovation and high levels of participation. They should be clear about their roles, responsibilities, competent team members, effective time management, value and diversity, high level of commitment, joint education and training and effective conflict resolution, and they should provide moral support and team spirit. Working in a team requires sharing roles, knowledge and skills (Day, 2006). The structure of the team's management or leadership also presents challenges. Communication skills and types also contribute to the effectiveness of interprofessional teams. The team's performance is also affected by the perceptions and understandings of team members. A survey conducted on 34 pharmacy students explored their perceptions of their roles in health care, suggesting that, although they considered their roles to be important, they lacked a systematic understanding of their actual roles and responsibilities and health care practice. Exploring and clearing their misconceptions through IPE programs can go a long way to enhancing the quality of health care service by increasing their awareness and encouraging them to take more informed career decisions so that they can play a better role in the health care of patients (Shoham et al.,

2016).

3.3.8 Communication

In the context of team management, researchers have recognized the critical role played by a team's communicative abilities. According to Day (2006), communication is important to the delivery of quality health and social care. It includes interpersonal communication, communication technology and mass communication. It can be formal or informal, verbal or written, and may come in the format of meetings or document sharing of patient records between professionals.

Lack of communication could result in medical errors and death. Referring to several such incidents, Day (2006) finds that these barriers include distraction, a slavish adherence to hierarchy and a lack of time. Other challenges include complex messages, ideological differences and professional language and jargon. According to Sargeant, MacLeod and Murray (2011), the quality of communication and collaboration positively affects patient outcomes. The authors argue that the communication skills of health care professionals could be improved with a formal communication skills training program (CST).

Sargeant, MacLeod and Murray (2011) have developed a two-hour communication skills workshop for health professionals. The topics of these workshops include essential communication skills, delivering difficult news and providing support when patients and families are angry, and managing conflict in the workplace. Approximately 118 professionals took part in these projects, and more than 20 health professionals attended 17 workshops. Comparative tests conducted prior and subsequent to the sessions show a significant improvement in professional communication skills after the workshops. According to the findings, the transformation of these communication skills affected approximately 87 per cent of patient outcomes. According to Conn et al. (2009), medical professionals must communicate with a diverse population of patients as well as other levels of health care providers.

Shoham et al. (2017) explored the complex coordination that occurs between specialists in multiple areas of health care, including health management, nursing, physiotherapy

and support. Their study involved a survey of these professionals, who were asked who they preferred to discuss health care matters with. It was found that nurses were 1.64 times more open to communicate than other professionals. Considering this, IPE can actually be seen as an ethical endeavour (Richards et al., 2017). In summary, communication types and skills play prominent roles in interprofessional relationships. Barriers to communication include jargon, culture and professional identity, all of which cause communication breakdowns. In the body of literature on SLTs, few researchers mention communication types.

3.3.9. Professional culture

Researchers have recently examined the cultural theme in interprofessional collaboration. Culture is defined as the social heritage of a community – in other words, it is the sum total of possessions, ways of thinking and behaviour which distinguishes one group of people from another and which tends to be passed down from generation to generation (Parkes, Laungani and Young, 1997). Similarly, each health care profession entails a different culture, including values, beliefs, attitudes, customs and behaviours. This culture is passed on to newcomers to the profession, but remains obscure to other professions (Schroeder et al., 1999, cited in Hall, 2005). At the pre-registration level, all health and social care professionals have their own profiles comprising such elements as educational experience, socialization processes, values, beliefs and jargon, all of which affect their perspectives of care and practical life.

Pahor and Rasmussen (2009) designed a study in order to explore the effects of national and professional cultures on interprofessional communication. The results show that interprofessional relations do not affect cultural differences between countries, although cultural differences between different professionals do affect interprofessional communication. Costello et al. (2011) note that respect is an important issue for teams and teamwork, and that it is a key element of interprofessional communication workshops. Giardino and Sigler (1994) hold that IPE helps medical students work collaboratively with other professionals in interagency collaborative practice, while Hall and Weaver (2001) state that all professionals must focus on their own professional learning skills according to cognitive theory. Petrie (1976:35) suggests that each

profession has a different "cognitive map'' and that two opposing "disciplinarians" can quite literally observe the same phenomenon and still have different perspectives on it. This cognitive map shapes professionals' cultural and professional differences.

Another important issue in the context of culture is values. According to Hall (2005), values have a great effect on culture. For example, physician culture focuses on outcomes more than relationships. Physicians may prioritize saving lives over quality of life. At the same time, education is also known to affect culture (Hall, 2005). Hence, pre-registration is culture's gateway. Hall posits that health care professionals all form their own societies in a sociological process of professional culture. For this reason, professionals tend to be attuned to practicing.

However, SLTs seldom refer to professional culture. Barron and Abdallahs' (2015) investigation of complex interactions between cross-cultural health care professionals for the purpose of exploring the ethics of decision-making in Western trauma recovery centers finds a few key ethical dilemmas faced by health care professionals, those being cross-cultural language differences, the trust factor, liberation of workers from organizational goals, democratization of processes and flexibility of structures. A novel learning activity was explored in a study of Australian health care professional students involving a structured video-based learning activity (Barron and Abdallah, 2015). A measurement scale was used to gauge cultural competence in these students before and after a learning activity. It was found that video-based learning with real life examples could improve the cultural competency of 64 per cent of these students. However, much depended on the group's dynamics and the merits of group discussion, which was part of the learning process (Olson et al., 2016).

3.3.1.0 Attitudes in IPE and IPCP

A growing number of researchers have recognized the importance of attitudes in the interprofessional field. For Golmen et al. (2010), attitudes may be defined as a disposition or tendency to respond positively or negatively towards ideas, objects, people and situations. They may encompass, or be closely related to, opinions and beliefs, and are often based on experiences (p.72). Hovland, Janis and Kelley (1953)

advance the view that learning new attitudes is different from learning other verbal or motor skills. Festinger (1957:73) maintains that Cognitive Dissonance Theory (CD) describes "a conflict between beliefs that causes attitude change". Kearsley (2007) asserts that attitudes can actually help change an individual's set of behaviours. Analogously, Laura et al. (2013) hold that attitudes and beliefs do affect health professionals' discipline and conflict management. Similarly, Rose et al. (2009) suggest that IPE and IPCP have become a popular issue in recent years. IPE and learning activities have been shown to have a highly positive effect on students' professional communication skills, roles and attitudes (Bradley et al., 2009).

An "Attitudes to Health Professionals Questionnaire" is a very useful instrument that can be used to evaluate the attitudes of interprofessionals (Dallaghan, Hoffman, Lyden, & Bevil, 2016). A study of 227 health care graduate students found that this programme had a positive effect on the attitudes of students, suggesting an improvement in their health care skills and an enhancement of their attitudes towards collaboration in health care. The study also found that female and older students who were more exposed to IPE practice were actually more open to collaboration (Kyo, Kloch, & Kim, 2014). Specifically, pre-registration education catalyses the development of the students' values, attitudes and professional identities; these values shape their perspectives on professional life, which then affects their professional self-identification. For McCaffrey et al. (2012), formal education programmes and discussions do improve the attitudes of nurses and doctors. The continuing education of nurses and medics can improve interprofessional communication and make attitudes more positive. Sick et al. (2014) report that clinical and interprofessional relations influence students' interprofessional attitudes. Similarly, Ruebling et al. (2013) note that IPE prepares practitioners for collaborative working, although attitudes are a key part of developing professional behaviours. These authors surveyed nearly 300 students before and after an introductory IPE course and report positive attitudes towards IPL and higher engagement. However, little data has been published regarding the attitudes of SLTs towards interprofessional teamwork in relation to hierarchy. In summary, attitudes strongly affect teamwork, interprofessional collaboration and understanding. IPE is an important component of

training in health care. However, its effectiveness is influenced by the attitudes of the faculty and trainees (Lindqvist, Watts, Duncan, Pierce, & Shepstone, 2005).

3.3.1.1. Leadership and hierarchy

Over the past few centuries, there has been a dramatic increase in medical errors. According to Wright (2014), they cause the deaths of 440,000 people each year in the US. Against this backdrop, Rothstein and Hannum (2007) examined the relationship between doctors and nurse using two models, one based on the interaction between nurses and doctors, the other on the patriarchy of male physicians and the deference of female nurses. According to the findings of the study, in order to evaluate the nurses' perceptions of these two models, 125 nurses who were advanced practitioners completed a closed, self-administered questionnaire that asked them about their relationships with male and female physicians at a statewide professional conference. Nurses rated male and female physicians in similar ways: both groups were rated most favourably on their confidence in the nurse's expertise and least favourably on their recognition of those nurse responsibilities not associated with individual patient care. The nurses rated male physicians of all ages similarly, and female physicians under the age of 50 more favourably than older female physicians. These findings provide greater support for individual professionals than for the gender model of nurse-physician relations (p.235).

Thylefors (2012) remarks that all professionals are equal, but some professionals are "more equal than others" in terms of dominance, status and efficiency, specifically as regards Swedish interprofessional teams. The author explored the differences with regard to status in interprofessional teams and the association of these differences with the efficiency of the team. It was found that psychologists, physicians and social workers are at the top of the hierarchy, along with special education teachers. Self-assessed efficiency and actual problem solving, or observed verbal activity and problem solving, were not related to each other. Hierarchy and negative behaviours can cause a lack of interprofessional communication, which could in turn lead to medical errors. As a result, the researchers found that interprofessional supervision has a positive impact on team outcomes and patient safety. Reeves et al. (2009) note that hierarchy does have

a major impact on interprofessional interaction, both formally and informally. McCartney (1999) posits that teachers in the educational sector and SLTs in the health sector must work together in order to provide effective therapy. The present researcher aims to explore IPCP in the practice of SLTs along with the views on IPCP of pre-registration students in SLT courses (IPE). Brewer et al 2005 mentioned the theory behind the IPCP model states that different professional groups deployed within a mutual fieldwork will enhance service delivery. To understand how leadership is defined in IPPs, he conducted a systematic review of 114 articles, most of which were empirical. No specific definition or leadership approach was identified; a need to conduct more research studies in order to explore health care practices and education for developing leadership models in the profession was noted (Brewer, Flavell, Trede, & Smith, 2015) Another study involving a survey of 229 health care professionals reveals that their understanding of leadership was unanimous and that their connotations of leadership in interpersonal teams were similar. Due to a lack of understanding of leadership in the literature, research is recommended on the subject (Mason and Forsyth, 2015). This section has discussed leadership and hierarchy. The following section will focus on professional identity.

3.3.1.2. Professional identity

Social Identity Theory holds that professional identity includes an individual's group membership and categorization. Hornby et al. (2000:110) states that

> *Professional identity comes from the character role based on the possession of specialized skills and a particular role relationship with those who need them.*

According to Wackerhausen (2009), professional identity has two levels, the macro and the micro. The first denotes the public perception of professionals, while the second concerns professionals' conceptions of themselves or their skills. David (2011) designed a program in which the students had opportunity to share their knowledge and socialize with each other's methods. DeMatteo and Reeves (2013) state that changing a professional's cultural and political environment would affect their professional identity. University students, for example, have different professional identities than

practicing workers. Morison, Marley and Machniewski (2011) find that professional identity in a team context is perceived as being distinct from individual professional identity. Morrison et al. (2011) points to the significance of professional identity for team development, stating that professional identity within the team is different from that outside it. The researchers studied a team of dental students and found that lack of confidence in leadership affected their knowledge, experience, responsibilities and team roles. Baxter and Brumfitt (2008) suggest that professional knowledge; skills, roles, power and status do affect professional identity in IPCP. In the literature on SLT, only a few researchers mention the professional identity of SLTs in the context of interprofessional team collaboration.

IPE is expected to improve perspectives on other professionals (Skull & Blue, 2014) conducted research on 864 health care students, recording their first years and their readiness for the IPL scale. Their study suggests that introductory IPE was incapable of changing the attitudes of students, In order to resolve such a situation; another study conducted in Japan's Gunma University was cited. This study's investigation of identity acquisition involved 1,581 respondents from nursing, laboratory and therapy departments. Professional identity formation was found to be influenced by roles, responsibilities, teamwork and collaboration (Kururi, et al., 2016).

3.3.1.3 Workplace theories

The past 30 years have seen marked improvements in the workplace. Gregory, Hopwood and Boud (2014) point out that space and work factors affect IPL in day-to-day practice. Similarly, Billett (2014) states that the shape of a workplace and the organisational sequencing of experiences for interprofessional work affect the concepts, procedures and values of IPCP. Kent et al. (2016) conducted a study that sought to understand the opportunities and challenges of IPE for future development on the practice and development of IPE involving interviews of clinicians. They identified the three key developmental themes of clinical factors, IPE considerations and organisational factors. When establishing IPE programmes, the training time for delivery was also a major consideration apart from the need for educational activities that would help in adapting to the requirements for future developments. The design and

delivery of an integrated training session that considers cultural, logistical and physical challenges in the workplace must be undertaken in order to build a better learning programme. The researchers focus on the theories behind IPE and how these relate to workplace learning. They show that a theory-based approach positively affects team-based care.

Gregory et al. (2014) focus on the workplace's effect on the understanding of IPL at an Australian teaching hospital. The authors show that the use of spatial theory to create a medical workroom positively affected IPL and day-to-day practice. Wareing (2011) finds that workplace-learning activities help students obtain a better understanding of traditional systems, communication and relationships with other professionals in busy training environments. Kitto et al. (2013) hold that "space and place" have a great impact on IPE. At the same time, universities and traditional models of medical as well as nursing education have a negative effect on IPE. Kitto et al. (2014) state that continuing education; IPE and workplace learning can facilitate the continuation of IPL activities in the workplace. As SLTs work in a range of environments, it is difficult to examine the effects of the workplace upon SLT practice. SLTs may work in health centres, hospital wards, outpatient departments, mainstreams and special schools, children's centres, day centres, clients' homes, courtrooms, prisons and young offenders' institutions, and independently through private practice (RCSLT, 2013). Baxter (2004) designed a study of SLT students' IPL experience at an acute hospital. The SLT students and tutors surveyed reported that workplace learning and learning with other professionals is important for collaborative working and learning.

3.4 Pre-registration IPE and post-registration IPCP in SLT

Despite advances in communications technology, the ability of an individual to transmit a message largely depends on the facility of speech. There are over one million children younger than 18 who still have speech problems or a language disorder in the UK. Nearly half million adult and young people who need speech and language therapy in the UK. Spoken language involves an understanding of words, sentences and connections in speech. Students with speech problems lack these comprehension skills (Bonita F. Stanton, 2018). The importance of using developing models of

reimbursement, complex diagnostics and intervention strategies for the holistic development of the students has been revealed over decades of SLT services provision to children with communicative and cognitive disorders (GOlom & Schreck, 2018). The ability to understand and communicate with others assumes significance for these students' development. Communication is both verbal and written. If they face delays in the acquisition of these skills, they could be susceptible to disorders and articulation delays in developing expressive language, motor planning deficiencies, sound production errors and language reception (Lui, 2018).

There are also other potential developmental issues with these children and adults that would require different services from other professionals. A holistic view with an integrated approach to contextual factors and conditions is therefore needed, while planning activities for their participation. In this way children with disorders would be seen as individuals who can influence or be influenced by their environment (McNeilly, 2018).

Developmental delays and complex chronic health conditions requiring intervention services are parents' major concerns. An early intervention from an SLP using collaborative principles is needed to address these concerns at early stages of development (KL. & J.J., 2018). Despite the increasing importance of and emphasis on IPE, health care practitioners work more independently and collaboratively in parallel. Different teams provide health care services to different patients at different stages, which act as a barrier to the development and application of IPE. An ideal way to bridge this gap would be to involve teams from patient networks so that the practice can be enhanced by shared understandings. Learning models can be refined for such shared practice, which can then significantly enhance the quality of care given by professionals (Dow, Ivey, & Shulman, 2018). A PCA study conducted on six EBP lecturers and 149 SLT students found that master's students were able to score higher than their bachelor's counterparts because they attained more self-sufficiency.

However, there is a need to further evaluate the psychometric properties, for which more research needs to be conducted (Spek, Waard, Lucas, & Djik, 2013). Teamwork models can help practitioners work in an integrated manner, which is necessary for those students with multiple disorders, as they require multiple services from a variety of practitioners. Effective teamwork in such cases requires goal sharing, real team formation and shared responsibility (Reeves, Xyrichis, & Zwarenstein, 2018).

Knowledge of communication procedures is part of SLTs' professional expertise in the course of their interprofessional work with educators and other professionals. In recent years, SLT services have undergone substantial changes in clinical practice. These professionals have had to adapt to the need for improved interprofessional teamwork, the increased use of psychosocial interventions and greater collaboration with users and careers. Several professional bodies and government policies such as The Joint Professional Development Framework and the Report of the Working Group have promoted interprofessional collaboration (DfEE 2000). Their publications aim to enhance professional development and the improvement of practice skills when working with children with special communication needs.

Against this backdrop, it is important to highlight the relationship between the experiences of recently qualified language therapists with professionals and multi-agency cooperation in mind. Hartas (2004) maintains that collaboration is a key aspect of the education of children with special needs. Tollerfield's (2003) findings are that collaboration between teachers and SLTs is important in special school settings. Similarly, McCartney (2002) holds that interprofessional communication barriers between SLTs and teachers are structural and systems-environmental, and affect the communication and sharing opportunities of both teachers and SLTs. Law et al. (2002) describe how the changes in SLT practice have affected SLTs' collaboration with teachers. Traditionally, clinic-based SLTs sought to work with individual children in order to redress their impairments. Today, SLTs look forward to supporting students within the classroom environment and in conjunction with other students. This is the practice of SLTs in the First Schools Project (Worcestershire SLT, 2002).

According to Wright and Graham (1997), therapists and teachers in such environments must develop collaborative working practices. SLTs also work with adults with swallowing difficulties. Boaden et al. (2006) explains that the Interprofessional Dysphagia Framework informs strategies for developing the skills, knowledge and ability of SLTs and nurses, along with other health care professionals and non-registered staff, in the identification and management of feeding-swallowing difficulties.

The SLT system is quite different in the US. The American Speech-Hearing Association (ASHA, 2013) evaluated a study on Speech and Language Pathologist (SLP) in order to provide information about health care service delivery and to gain new insights about SLPs. The data was classified into nine types of health care facility: general medical and long term acute care (LTAC) hospitals, rehabilitation hospitals, paediatric hospitals, skilled nursing facilities (SNFs), home health agencies, client's homes, outpatient clinics, and offices. The sample included 4,000 ASHA-certified SLPs employed in health care settings. In this survey, the researchers asked the respondents to identify how frequently they engaged in collaboration with other professionals.

Overall, the results indicated that, in some cases of SLP work (e.g. documentation and assessments), they do not prefer to work in an interprofessional manner, whereas in clinical team and patient/family meetings they do. Brumfitt, Enderby and Hoben (2005) state that newly qualified SLPs' managers must describe the work skills required in non-clinical and clinical settings. Byrne and Pettigrew (2010) point out that the biggest barrier to collaboration in health care is the lack of knowledge of other roles. For example, they observe that health professionals on a stroke rehabilitation team reported having a good understanding of the benefits of interprofessional working, and knowing about the kind of role played by SLTs on that team. However, nothing about the SLT's role during the acquired disorders of alexia and dysphagia was reported. As a result, all researchers who have explored interprofessional working in the field of SLT have recommended additional research.

Lindsay et al. (2002) emphasizes that local authorities must collaborate with health care service providers in order to promote improved provisions for children with speech and language difficulties. As stated earlier, this has been a challenge because of irregular contact between different service professionals such as teachers and SLTs. To promote this, it is important to create a formal strategy that will guarantee communication, rendering it the norm in interprofessional and agency collaboration. Dockrell and Lindsey (2001) and Sadler (2005) report that teachers have received little training for identifying or meeting special needs students' language development requirements, while Wright and Kersner (2004) suggest that SLT courses emphasize working with teachers and the education system. It is thus obligatory for the concerned school professionals to be conversant with the actual training of SLTs in order to appreciate the value of such professionals.

As a solution, Dunsmuir et al. (2006) And Sadler (2005) among others has recommended that these professionals receive and deliver joint training. Researchers discussing interagency collaboration have emphasised the need for adequate time and resources. Law et al. (2002) require managers to allocate time for SLTs to work effectively with schools. Dockrell and Lindsay (2001) concur, stressing that SLTs have insufficient time in the school context, resulting in poor collaboration between them and classroom practitioners. Although researchers have underscored the importance of *dedicated* time, not all authors agree that this time would be *extra* overall, as collaboration can lead to savings in time and effort. Special language teachers with smaller class sizes and high levels of teaching assistant support reported positive collaboration experiences with SLTs. Wright (1996) states that collaborative practices require effort, energy and commitment. In order to maintain this voluntary partnership, teachers and SLTs must be aware of the advantages and disadvantages of collaboration. In Wright's study, both SLTs and teachers observed that the advantages included personal and professional gains, in addition to student improvement. The participants also reported learning from one another. Wright concludes that professionals' awareness of their own learning and professional roles would enable positive collaborative working practices.

Other delivery models for SLT services have evolved alongside the First Schools Project. The present researcher has sought to evaluate the contexts, mechanisms, outcomes and theories of such alternative models, including the causal relationship between mechanisms and outcomes. Most researchers including Wright (1996) have agreed that collaboration involves shared responsibility and knowledge. For the purposes of this study, collaboration will involve the shared understanding, knowledge, responsibility and action of parents as well as professionals.

IPE experiences are much needed in undergraduate health education, and simulation is one popular methodology used in IPE practices. Simulation involves video-based role-play tutorials that are used for student learning facilitation. Using this approach, a study of 70 speech and 76 occupational therapy students found that the session resulted in positive responses, students feeling that they could meet the learning objectives. Furthermore, the use of DVD footage in training sessions helped them understand patients' complex disabilities (Levis, Rudd and Mills, 2019). Another study surveyed 281 SLT students order to determine their knowledge, skills and perceptions, finding that students with more well-rounded clinical experiences rated highly on their team capabilities (Morrison, Lincoln and Reed, 2009). Another assessment of first and second semester students' on their perceptions and teamwork skills observed a significant attitudinal change in students after they had undertaken IPE sessions; their teamwork skills significantly improved (Renschler, Rhodes and Cox, 2014). A literature mapping of 42 publications on reflective practice of learning in pathology identified a clear need for conceptual and empirical exploration of reflective practices for the development of programs in clinical contexts involving both verbal and written reflections as two key approaches (Caty, Kinsella and Doyle, 2014).

3.5 Summary of chapter

This chapter has focused mainly on the relevant literature on IPE and IPCP with their theoretical backgrounds. It has also discussed pre- and post-registration IPE/IPCP in SLT across various service providers, professionals and interagency communication as the basis for valuing other professionals and actors in the provision of care, especially in the context of speech and language-challenged individuals. It highlights the importance of communication between professionals as much as between such actors as professionals, parents and patients. It would appear that interprofessional communication and collaboration is hampered by various factors ranging from general professional dispositions to cultures and protocols. It is therefore important to investigate prospective negative and positive experiences of individuals in such circumstances in order to find an evaluative approach to studying IPCP/IPE strategies that would foster desirable, proactive service provision characterised by holistic service provision and punctuated by a communicative and informed professional practice. This could possibly be guaranteed by an IPE-grounded system of communication that would oblige various departments and professions to practice in such a manner. In the next chapter, the researcher describes the methodology he has used to answer the research questions while filling the gaps in the literature.

CHAPTER 4: RESEARCH METHODOLOGY

This chapter revolves around the identification of key philosophies, research paradigms, approaches and strategies, and the rationale for selecting the research methods, data collection instruments and procedures. It discusses the sampling procedures employed to access the participants and examines the ethical considerations for this present study. The epistemological position of this research and the influence of phenomenology will also be established in this chapter.

4.1 Research paradigm and methodology in general

This section will discuss the theoretical background of the research, analysing the relevance and philosophy behind the research approach. A discussion of the various paradigms underlying the study will be made to provide a clear basis for the research strategy used. A paradigm is

> *A philosophical and theoretical framework of a scientific school or discipline within which theories, laws, generalizations, and the experiments are performed* (Merriam Webster Dictionary, 2017).

According to Kuhn (1962) “it is the set of common beliefs and agreements shared between scientists about how problems should be understood and addressed.” The term “research” is described as a systematic investigation (Burns, 1997) or inquiry whereby data is collected, analysed and interpreted to "understand, describe, predict or control an educational or psychological phenomenon or to empower individuals in such contexts" (Mertens, 2005:2). The "exact nature of the definition of research is influenced by a researcher's theoretical framework", wherein theory is used to establish relationships between or among constructs that describe or explain a phenomenon by going beyond the local event and connecting it with similar events (Mertens, 2005:2). It determines the way knowledge is studied and understood. It is the choice of paradigm that determines the research’s intent, motivation and expectations. In short, paradigms are based on belief systems grounded in ontological, epistemological and methodological

assumptions. Against this backdrop, selecting a paradigm is the first step that influences the methodology, methods, literature and research design. Paradigms are not discussed in all research, and are given various levels of emphasis and sometimes even conflicting definitions. Consequently, the term “paradigm” may be defined as "a loose collection of logically related assumptions, concepts, or propositions that orient thinking and research" (Bogdan and Biklen, 1998:22) or the philosophical intent or motivation for undertaking a study (Cohen and Manion, 1994:38). MacNaughton, Rolfe and Siraj-Blatchford (2001:32) define the concept as a belief about the nature of knowledge, a methodology, and a criterion for validity. The interpretive framework can be viewed as “knowledge claims” (Creswell, 2003) based on epistemology or ontology, or even as research methodologies (Neuman, 2000), rather than with reference to paradigms. Theoretical paradigms such as positivism (and post-positivism), constructivism and interpretivism, along with transformative, emancipatory, critical, pragmatic and de-constructivist paradigms, are discussed in the literature.

For the present research, the researcher used the Interpretivist/Constructivist paradigm. Interpretivism is based on interpretation, and can be arbitrary. It grew from Husserl's phenomenology and Dilthey's study of hermeneutics (Mertens, 2005:12, citing Eichelberger, 1989). Interpretivist or constructivist approaches to research explore "the world of human experience" (Cohen and Manion, 1994:36), where "reality is socially constructed" (Mertens, 2005:12). This approach tends to rely upon the “participants’ views of the situation being studied" (Creswell, 2003:8) and acknowledges their impact on the research as being influenced by their own background and experiences. Constructivists generally do not commence with a theory (as do post-positivists). Instead, they "generate or inductively develop a theory or pattern of meanings" (Creswell, 2003:9). This results in the development of approaches such as action research and grounded theory. Such a paradigm and its research approaches rely on qualitative data collection methods and analysis or a combination of qualitative and quantitative methods. Quantitative data may be utilised in a way that supports or expands upon qualitative data, thus effectively advancing the description.

In reviewing the literature for this thesis, the author discovered that many texts do not define the terms "methodology" and "method". Some use the terms interchangeably, while others distinguish between them. According to the Macquarie Dictionary (3rd ed.) 2014), "methodology" is the science of methods, especially a branch of logic dealing with the logical principles underlying the organisation of the various special sciences, together with the conduct of scientific inquiry. Most definitions are consistent with much of the literature (Leedy and Ormrod, 2005; Schram, 2006) despite being generic, as opposed to ones that are discipline or research-specific. The most common definitions suggest that "methodology" is the overall approach to the research linked to the paradigm or theoretical framework, while "method" refers to systematic modes, procedures or tools used for collection and analysis of data.

The present study focuses on a qualitative approach to explore the participant's "lived experiences", based on the premise that an interpretive approach would be best suited to uncovering the multiple realities of their experiences that are appropriately aligned to the author's theoretical beliefs and values that form the basis for this research. Within the literature associated with qualitative research there appear to be five distinct methodological approaches: grounded theory, ethnographic, case study, narrative and phenomenological (Creswell et al., 2006). Each approach is based on a different set of philosophical beliefs emerging from a variety of academic disciplines (Gelling, 2015). Identifying underpinning philosophical beliefs is important in order to enable an understanding of the five approaches that are best suited to answer the research question through the methods employed in data collection and analysis. Based on a careful consideration of this study's research aims, the decision was taken to use an approach based on the philosophical underpinnings of phenomenology to answer the research questions. For the understanding of the SLTs' lived experiences, the researcher used the phenomenological approach. The following section will extensively discuss this approach.

4.2 Qualitative research methods in general

According to Brikci at al. (2007:2)

> *Qualitative research addresses different aspects and questions related to human and societal life, and the methods that generate words to be used data for analysis*.

Cohen, Manion and Morrison (2013) state that

> *Qualitative studies allow researchers to traverse various participant opinions, perspectives, and experiences as well as the interpretation of their knowledge*.

A qualitative approach is characterised by its exploratory nature, so the research questions for such an approach demand the adoption of a probing stance. Consequently, a qualitative study allows the researcher to engage in the exploration of feelings or thought processes, which are almost impossible to reveal using conventional quantitative research methods. The researcher then becomes an active participant during the research process (Cresswell, 2005). This was an important element in the present research, where the researcher was primarily responsible for data collection as well interpreting the findings (Stake, 1995). A qualitative approach is therefore a general way of thinking about conducting qualitative research. It describes, either explicitly or implicitly, the purpose of the qualitative research approach, the role of the researcher(s), the stages of the research and the method of data analysis.

4.3 Qualitative approach in the current research

The main steps in this research include identifying whether the specific research questions the study aims to address are best answered using a quantitative or a qualitative approach (Brikci, 2007). The qualitative research design is the most appropriate approach for the aims of this research, given that it is exploratory. The researcher attempts to explore the lived experience of SLTs in IPE and IPCP. This means that his primary focus will be the specific phenomenon of SLTs' experience and knowledge and their roles in IPCP and IPE. The present researcher has chosen to use

qualitative research to gain a deeper understanding of qualitative data. The ICPCs experienced by the SLTs entail this phenomenon. The researcher has chosen qualitative methodology because of his focus on discovering the knowledge acquired by recently qualified SLTs, their IPCPs and IPE. The researcher has used interviews in order to elicit this information. This strategy is a reliable tool used mostly by qualitative researchers. In short, the present researcher has focused on the individual phenomenon as well as various participants' experiences with IPCP and IPE. In order to describe the individual phenomenon, the researcher used interviews to collect data.

A wide variety of methods are common in qualitative measurement. In fact, these methods are largely limited by the imagination of the researcher. Participant observations, interviews, diaries and focus group discussions are commonly used in the data collection processes. The present researcher used semi-structured interviews to collected qualitative data. Semi-structured interviews involve seemingly informal and direct interactions between a researcher and their respondent. This is different from traditional structured interviewing in several respects.

Firstly, although the researcher may have some initial guiding questions or core concepts to ask, there is no formal structured instrument or protocol. Secondly, the interviewer is free to lead the conversation in any direction of interest that may present itself. Consequently, unstructured interviewing is particularly useful for broadly exploring a topic. However, this structural freedom comes at a price. Each interview tends to be unique, with no predetermined set of questions to be asked of respondents, making it often more difficult to analyse unstructured interview data. The questions for the present interviews were designed to encourage participants to explore what came to mind regarding how and when they experienced critical issues regarding IPE and IPCP. Some participants' justifications could have been premised on the expected standard of the job process of SLT assessment instead of individually generated strategies. The researcher used phenomenological approach frameworks to collect his interview data. The following section will focus on the phenomenological approach with interpretative phenomenological analysis.

4.4 The phenomenological approach and interpretative phenomenological analysis in general

The philosophical framework for phenomenology was based on that discipline. It was primarily influenced by the ideas of the phenomenologists Heidegger, Van Manen and Smith. For Heidegger (1988), the "lived experience" is itself an interpretive process, and it is the understanding of that experience that the phenomenologist must focus on. Heidegger argued that the aim of the researcher should be to share human experiences (Dowling, 2007:134). For Heidegger, understanding is a viscerally reciprocal process. He termed this approach "hermeneutic" (Heidegger, 1988). Van Manen contributed to the phenomenological movement, combining aspects of Husserl's descriptive phenomenology as well as his interpretation (Dowling, 2007). Van Manen advocated the exploration of human experience through "themes" (Van Manen 2002), strongly believing that the interpretation of these meanings should not be "rule-bound".

Smith (2010) has driven the development of Interpretive Phenomenological Analysis (IPA) as a method for data collection. For Smith, IPA encourages the researcher to explore and interpret the lived experiences of the participant (Smith et al., 1999; Smith, 1996). When individuals experience a phenomenon, they are able to talk about these experiences at a later point in time. Researchers and participants have been able to explore participant's experiences of a particular phenomenon. This process may have been conducted in interview conditions with the consent of the participants. The data is later analysed on phenomenological lines in an umbrella approach, but the TA used for data analysis in this research will be discussed later in this chapter.

When using the interview method to encourage a participant to recall and recount specific experiences, researchers make several assumptions: that participants can accurately recall relevant event(s), that they feel comfortable sharing their true experience(s) of the phenomenon, and that researchers will be able to develop interpretations of what the participants have shared, during the interview and later when they analyse the recorded and transcribed dialogue. In successful interviews, participants give accounts of the experience as they recall it. It is possible for the

researcher to determine how accurately the account reflects what happened. This does not constitute a limitation of this approach, however, because the researcher is interested in the participant's experience of the event and how they recall it.

They can also be aware of other factors such as social desirability and perceptions of the research's objectives that may affect the participant's version of events. For example, participants may not wish to reveal their lack of training because of a perception that this is socially undesirable. Analysis from a phenomenological perspective explores the deep meanings embedded in what the respondent is saying. The true nature of an experience is the individual's view and the ways in which they make sense of the experiences they are discussing (Grbich, 2007; Langdridge, 2007; Hitzler and Eberle, 2004). When phenomenologists use the term, "meanings", they refer not only to the literal meaning of the words and language that the individual intends with each utterance but also the contextual, personal and emotional, unique and subjective meanings in terms of what they are saying. This constitutes the "lived meaning", which in the present research was captured using Interpretative Phenomenological Analysis (IPA), a qualitative research method concerned with searching for and understanding the experience of a particular phenomenon (Smith, 2004). Smith developed IPA in the 1990s as "a qualitative approach to psychology which was grounded in psychology" (Eatough and Smith, 2008:180). This method is generally used in many psychology-based research settings such as social psychology, counselling, and health and social care (Smith, 2004).

The main objective of IPA is lived experience and how people articulate it in relation to their personal and social worlds. However, the lived experiences are not really descriptive in nature (Gadamer, 1990; Dowling, 2012). In that case, hermeneutic phenomenology helps IPA better decipher the aspect of interpretation. The researcher must be careful when interpreting the individual's lived experience. Hermeneutic ideas sometimes influence researchers as well. According to Smith (2008), researchers must persuade participants to tell their personal stories without being influenced by the researcher's preconceptions. Smith also mentions that participants and researchers must both be active in the process of deriving the understanding of the individual experience.

In such a situation, IPA focuses on the details of lived experiences (phenomena), which pertains to the understanding of particular data, as opposed to the whole. IPA explores the similarities and differences between specific data or phenomena.

4.4.1 How phenomenology and IPA are applied

In the interviews, the researcher attempted to discover the inherent "meanings" in the participants' experiences of the phenomenon. When the researcher was satisfied that participants and the researcher had a shared understanding of these meanings, they became known as "shared meanings". When analysing the data, researchers identify and further interpret the themes as "units of meaning" in individual transcripts, along with those occurring across the dataset as a whole (Hycner, 1985, cited in Cohen et al., 2007). Dowling (2007) describes this process as the gathering of "descriptions" into "units" and the development of the latter into "meanings", which are finally brought together to "create a general description of the experience" (Dowling, 2007:135).

The present researcher explored the meanings of certain experiences as well as a shared understanding of the participants' experiences, identifying those data elements containing aspects of the participants' experiences that were mentioned as crucial. Points in the interviews in which meanings were clarified with the participants were recognised. For example, transparency and reflective thinking during the analytical process reassured the reader that the researcher had indeed accurately represented the "lived meanings" revealed in participants' accounts. Drawing upon a hermeneutic (i.e. interpretive) approach to phenomenology, the present researcher exercised interpretive skills at every stage of data collection and analysis. In IPA terminology, the research method is relevant because, according to Smith, the researcher must find the link between the various findings in the theories and literature after this stage (Smith, 2004).

In most social science research the behaviours of individuals have been generalized to the whole population. In the present research, individual experiences of Interprofessional Collaboration and Education were used to obtain an understanding of SLTs' perspectives on collaborative working. These phenomena are generally related to an individual's experience of some life activity or significant relationship (Smith, 2004).

IPA is known as “double hermeneutic”, which means that the participant’s experiences make sense (Smith et al., 2009). The second reason is that IPA uses phenomenological and social constructionist methods, which means that it involves personal experience and interpretation. The researcher used IPA for the purpose of eliciting individual SLTs’ experiences and how these could affect entire SLT groups. SLT practitioners were sensitively but astutely questioned in such a way that they began to explore and question their deeper assumptions as well as personal experiences. The style of questioning used was designed to guide both participant and researcher in mutually uncovering “the essence of an experience” (Grbich 2007:84), to identify the objective of the phenomenological research.

4.4.2 The ontological position of the current research

Ontology can be seen as being situated within the theories put forward by constructionists. It claims that knowledge, truth and reality can never be truly known because an objective world that can be discovered, measured and quantified does not exist (Pring, 2004). The present researcher has used a social constructionist approach, which relies his fact that the human condition is difficult to measure. This means that there are no measurement tools for its meaningfulness (Burr, 2002). Meaning and trust are socially constructed by the phenomenon (Madill, Jordan and Shirley, 2000). This observation is clearly supported by Smith and Osborn (2008). The participants try to make sense of their world; the researcher, on the other hand, tries to make sense of the participants’ world (Smith and Osborn, 2008).

The present research uses the phenomenological approach in order to understand individual experiences and knowledge. According to Smith et al. (2010) the phenomenological approach aims to explore the experiences of individuals in discovering a perspective on their lives in relation to a phenomenon, to uncover what matters to people within their lived worlds. Within this ontological and epistemological framework, the researcher wants to understand the knowledge, perspectives, experiences and roles of SLTs in the contexts of interprofessional teams and of a variety of team settings. The knowledge obtained from this research is built mainly on the

researcher's exploration of the relevant literature and an explanation of his data collection strategy. The repeated ideas and themes affirm the relevance of data collected to be used as evidence for the research. The normal character of this research procedure shows "one of many possible interpretations of a phenomenon" (Yardley, 2000). All this research interpretation could be biased and subjective. This means that our understanding of the real world could be based on the perception and interpretation of the researcher. During the data collection stage, the researcher has tried to explore and analyse the participants' interpretation of the underlying phenomenon. Analysis of this data could be subjective. For that reason, every key stage of the research has been recorded.

4.5 Epistemological positioning of the current research

Epistemology is known as the theory of knowledge. Smith defines epistemology as ''how we know things" (Smith, 2008), while Quinn-Patton defines it as "how we come to know what we know" (Quinn-Patton, 2002). Richer (2000) argues that phenomenology does not give full access to individuals' lives; it only allows some understanding of the experiences and opinions they use to express their worldviews. This research takes an interpretative epistemological position, which means that phenomenology provides feeling, research and perception, as well as their own sense of language about a particular experience.

The present researcher has been especially careful to interpret the participants' relations of their realities using their own words. More specifically, the researcher has used links with relevant literature to interpret the participant's phenomena through appropriate theories. These methods epistemologically fit the interpretive paradigm and can therefore be seen as the real experiences of recently qualified SLTs regarding IPCP and IPE. However, Robson mentions that, in the context of interpretive epistemology, emotions and thoughts can affect individual behaviours (Robson, 1993). An understanding of social action and emotion has an impact on interpretive epistemology. In other words, epistemology means acquiring knowledge through experience and acquaintance.

4.6 Methodological framework of the current research

The methodological approach of this study is a qualitative method described by Denzin and Lincoln (2011) as one that involves an interpretation of the study's subject. In addition, it includes a phenomenological approach and methods. The aim is to describe the experiences people themselves have lived. These experiences are part of an exploratory study, and the researcher has tried to find some phenomena experienced by the participants. The study rejects an objective epistemological stance in favor of a more relativist and interpretive approach. It aims to explore this knowledge, set of perspectives and experiences, and the roles played by SLTs in interprofessional teams and various team settings. Later in this chapter, the methods and tools employed and how they were applied to the conduct of this study are explained. The research methods chosen are based on the historical data provided by previous studies along with a variety of other factors.

4. 7 Limitations of the current research methodological frame work

According to Brikci (2007:2), the common criticism of qualitative research is that the

> *Samples are small and not necessarily representative of the broader population, so it is difficult to know how far we can generalize the results; the findings lack rigor; it is difficult to tell how far the findings are biased by the researcher's own opinions*.

The primary weakness of qualitative research methodology is its possible bias and prejudices on part of the researchers that may skew the results in favour of their perspectives. The analysis of complex data presents a significant challenge to qualitative research methodology. A sample size generally consists of 25 per cent of the superset or the population, which for the present purposes can be taken as 21 SLTs who work in the UK. This means that 125 SLT students graduated from DMU, of whom the researcher managed to recruit 21 as participants for the pilot study. However, transcribing complex data and deriving conclusions from it is highly challenging, since the understanding of the research question differs between researchers and it may not be possible to reach

common ground. The main weakness of qualitative research is that of generalization due to small sample sizes. However, if researchers decide to increase the sample size, it does not always conform to the basic principles of qualitative methodology, since the result would be more group opinion than the derivation of results from a study of transcribed data. Within the phenomenological research approach the present researcher has also encountered these limitations, which include how articulate the participant is, the misunderstanding and clarification of terminology and the drawing of conclusions from time- and space-specific statements by participants (Smith, 2003). These limitations will be reflected during the research process. Some can be identified before the process begins, such as not stating what the participants wish to do in the interview, which could affect their group membership or roles. Many of these cannot be overcome in any research. Instead, the researcher is called on to be sensitive to certain factors and to reflect on them during the research process. In the present research, their relevance at different stages has been explored.

4.8 Acknowledging the researcher's affiliation

All the participants were informed that the researcher was a PhD student, that the research was based in the Division of Speech and Language Therapy at DMU, and that the interview findings would form a part of the thesis.

4.9 Acknowledging the influence of the literature

The literature review has explored the research surrounding the subject's influence on the researcher's conceptualisation of the topic and his approach to conducting research in this area. As a reflective practitioner, this notion was acknowledged and noted throughout the process in order to check for any influences or bias and for subjectivity in the fieldwork and analysis.

4.10 Summary of the chapter

The present researcher has attempted to explain various frameworks and research strategies and how they could influence the real research process. Consideration has been given to constructing a theoretical basis for this research. It is always important for the researcher to practice reflexivity. This forms the core principle for reflective researchers, since it guides their awareness of the process from fieldwork to analysis. In this chapter, the researcher has discussed research methodology in general and how those research methods apply in the current research. The study uses qualitative research methods to answer the research questions within the phenomenological and IPA frameworks. The chapter mentions semi-structured interviews to collect qualitative data from participants. The following chapter will focus on the research design and methods.

CHAPTER 5: RESEARCH METHODS

This chapter will discuss the various research methods selected for this research. An exhaustive discussion of these methods will be made in order to enable a clear exposition of the chosen methods, their merits and their shortcomings. This choice of research methodology is based on design, sampling, data collection and data analysis. If the selection is not appropriate, the results can be misleading. The research design can designate the population from which the data will be collected and which groups should be catered to for data selection. This factor also determines when to collect data from which group. The second factor that helps in the choice of research methodology is sampling. The sampling of data could be from the entire population or from a specific set of participants. The main advantages of sampling are that it saves the cost and time required to do the research, it increases the quality of information by allowing for intensive data collection, and it reduces the respondents' workloads. In this way they can continually refine the initial questions. However, the drawback of this approach is that it cannot include new questions during the course of the research. The third factor is data collection. The researcher has to develop appropriate data collection tools with theoretical backgrounds to collected data. This chapter begins by posing the research questions, aims and objectives. It then describes the research design and data collection methods. Finally, it outlines ethical considerations, the researcher's bias, and reflexivity.

5.1 Research questions

1. What are the experiences, roles and knowledge of recently qualified SLTs regarding Interprofessional Collaborative Practice (IPCP)?
2. What are the outcomes of Interprofessional Education (IPE) for the current practice of SLTs as regards IPCP?

5.2 Research aims and objectives

1) The first aim of this study is to explore the experiences, roles and knowledge of SLTs regarding IPCP.
2) The study's second aim is to explore the attitudes of SLTs to pre-registration IPE, regardless of whether it is relevant or valuable to their current IPCP.

The objectives of the research are:

- To explore SLTs' experiences of IPCP and IPE
- To investigate their attitudes and views regarding their pre-registration preparation in the context of IPCP
- To evaluate their knowledge of IPCP and IPE
- To explore the roles assumed by SLTs in various interprofessional contexts and team experiences
- To evaluate the attitudes and views of SLTs in various interprofessional contexts.
- To elaborate on SLTs' experiences of their relationships and communication types, challenges and hierarchical positions as regards other team members.

5.3 Participants

Newly qualified SLTs who had graduated from DMU in the previous five years were selected through the Alumni Office. They were informed of the benefits of this research for their profession, which persuaded some of them to volunteer. Over 125 graduates were approached; the response rate of 20 per cent was a reasonable enough number of participants. The previous five years' graduates in DMU's pre-registration degree of BSc Human Communication (Speech and Language Therapy) were contacted using their email addresses, which they had supplied on graduation to the SLT Division and DMU Alumni. The invitees were then asked to send a confirmation email to the researcher signalling their interest in participating. Subsequently, they were sent the Participant Information Sheet, Manager Information Sheet and Consent Form so that they could make informed decisions. The sample size was 21, in line with the principles of interpretative phenomenological analysis. As IPA research requires a small number

of participants, between three and six can constitute a reasonable sample size (Smith, Flowers and Larkin, 2009). These authors state that large sample sizes tend to adversely affect IPA research. They argue that for doctoral research between four and 10 interviews should be enough to produce data. The interviewees selected for the pilot studies were employed in various sectors. The researcher invited all the previous five years' approximately 125 SLT graduates, aiming to recruit at least 21 participants (Smith et al., 2009).

Participants	Gender	Age Range	Sector	Client Group	Settings
P1	**F**	**20-29**	Independent	Children	School
P2	**F**	**40-49**	Health and Education	Adult/Children	Primary school/ Hospital
P3	**F**	**30-39**	Social care	Adult	Learning disabilities centre
P8	**F**	**40-49**	Education	Children	School
P9	**F**	**20-29**	Social care	Adult	Rehabilitation centre
P10	**F**	**30-39**	Health	Children	Clinic
P11	**M**	**40-49**	Social care	Adult	Residential home/Rehabilitation
P12	**M**	**50-60**	Health/Social care	Adult	Rehabilitation centre
P13	**F**	**40-49**	Education	Children	School
P14	**F**	**30-39**	Education	Children	School
P15	**F**	**30-39**	Independent	Children	School
P16	**F**	**20-29**	Social care	Adult	Rehabilitation centre
P17	**F**	**20-29**	Health	Adult	Hospital
P18	**F**	**30-39**	Health	Children/Adult	Clinic
P19	**F**	**20-29**	Independent	Adult	Learning disabilities centre
P20	**F**	**30-39**	Education	Children	School
P21	**F**	**20-29**	Education	Children	School
P22	**F**	**30-39**	Health/Social care	Adult/Children	School-Resident/Rehabilitation
P23	**F**	**50-60**	Health /Social care	Adult	Learning disabilities centre
P24	**F**	**20-29**	Health	Children/Adult	Clinic
P25	**F**	**30-39**	Health/Social care	Children/Adult	School/Rehabilitation centre

Table 5.1: Demographic participant information

5.4 Semi-structured interview

Semi-structured interviews were used to collect data from the participants. SLTs agreed to share their knowledge, experiences and roles regarding IPCP and IPE. Interviews were scheduled to last one hour, which is regarded as an appropriate length of time for an in-depth interview. The date and timing of the interview were negotiated in advance with the SLTs in order to avoid adversely affecting their work. The drafting of interview schedules allowed the researcher to prepare for the encounter and to set a loose agenda to guide the interview if required. Following Cohen et al's (2007) strictures, open-ended questions related to research questions and topics were prepared prior to the interviews. The questions in the interview framework had a theoretical background, especially in the learning, team working, adult learning, pre-registration and team roles. Communication, workplace, stereotype and team relation theories, hierarchies and obstacles were all considered for this process. Each interview was recorded, transcribed and coded. In addition, researchers took handwritten notes. The questions within the schedule were not a repetition of the overarching research questions, but were designed to address them.

5.5 Pilot study

According to Baker et al. (1994), a pilot study can be the pre-testing or "trying out" of a particular research instrument. In the present research, a pilot study was undertaken before conducting the data collection, to ensure that the strategy would yield the desired results. The methodology for this pilot study was qualitative and used four SLT volunteers who had graduated from DMU. Semi-structured interviews were used for data collection.

	Gender	Age group	Sector	Client	Settings
P4	F	20-29	Health	Adult	Hospital
P5	F	30-39	Independent	Adult/Children	School, Clinic, Home
P6	F	40-49	Independent	Children	School
P7	F	40-49	Independent	Children	School

Table 5.2 Pilot participant information

The aim of the pilot study was to explore the style of the interview questions and describe how this affected the data collection process. The researcher sent emails to the participants inviting them to reply by email or phone. Informed consent was obtained to ascertain if the participants were interested in being involved. Consent forms (see Appendix 1) were supplied to the participants before the interviews. The researcher allowed the participant's time to read the consent forms and ask questions, and sent manager and participant information sheets via email (See Appendices 6 and 7).

5.5.1 Pilot study data collection and analysis

All interviews took place in a comfortable and secluded space. The research process, including ethical issues and participant rights, was explained by the researcher at the outset. Subsequently, the researcher commenced interviewing all the participants and recording their conversations after obtaining their consent. The interviews, which took place both at DMU and in interviewees' homes in London, Leicestershire, Nottinghamshire and Lincolnshire, followed the pilot study's semi-structured interview framework. They were 40 to 60 minutes long and stated the number and types of question. Thereafter, they were transcribed verbatim, including the participant's demographic information and the details of their participation in this pilot study.

Some materials, such as a copy of the interview framework for the researcher to take notes and follow the headings, and a consent form for the participants, were used for this pilot study. In addition, a digital voice recorder, iPhone and Mac PRO computer were used to record the interviews. The interview framework used in this pilot study is described in Appendix 8.

After analysing the pilot interviews, it can be seen that Question 1, regarding the interviewee's current job, and Question 2, on previous job sections, have been deleted from the interview framework. The participants added them to a separate interview framework sheet for completion. In addition, some prompt questions such as Part 4 (communication barrier) and Question 8 (relating to hierarchies) were deleted. Because of the nature of these interviews, the framework had to be altered to a two-part structure of pre-interview and interview. The researcher provided the pre-interview framework to the participants before the interview (see Appendix 8). The subsequent interview framework was supplied to the participants (see Appendix 11).

The pre-interview framework was shared by the researcher with the participants to aid their understanding of the interview questions. It also improved the time management of the interview process and removed the transcription of irrelevant interview data. As a result, the interview framework and questions followed this process in the main study. It was recognised during the pilot study that some participants answered questions that they were not asked. The researcher sometimes omitted these questions at their first mention, subsequently introducing them in order to add elements. The interview recordings show that the researcher made the effort to ask open as opposed to closed (yes/no) questions. However, the researcher sometimes intentionally asked closed questions to make the participants feel comfortable. Open-ended questions encourage participants to provide more information about the subject questions or topics. The transcripts of the pilot study interviews show that cross talking sometimes occurred. One of the main observations of the interview with SLTs in the pilot study was that SLTs give all information they wanted to without being prompted by any research questions. In such cases the researcher listened carefully and took notes. It was difficult to explore specific aspects in detail. The researcher took notes during the interviews to

ensure congruity with the research questions and to prevent repetition. Their experiences could illuminate those of various sectors. In the main study, the researcher had to deal with the findings of participants in the various sectors. To sum up, the pilot interviews were conducted successfully and useful data was recorded and analysed.

5.6 Main study

In accordance with the overarching research questions, the researcher structured the interview schedule to begin with an exploration of SLTs' perceptions regarding IPE and IPCP. Robson (2002) points out that interviews are considered descriptive tools for stories, accounts narratives and texts. Researchers select one of them for interpretation. The interviews began with a question that put the participant at ease. The researcher ensured that the participant was comfortable with the questions before scheduling the interview, as this was vital for the purpose of reassuring the participant that the researcher did not have a hidden agenda that might influence the quality or length of their input. The interviewer should show interest in and respect for participants, and help them demonstrate their experience in a safe and calm place. The researcher must also inspire participants to talk openly and frankly (Tracy, 2010).

Headings	Researcher aims to explore
Pre-registration course	Effect of IPE courses on the SLTs IPCPs
Interprofessional working	The interprofessional working experience of SLTs in different settings
Team experience and roles	The interprofessional team experience of SLTs in different settings and have their roles fit into their interprofessional teamwork
Communication types, barriers and hierarchies	Communication type of the team, what the barriers to this communication are, and the leadership of the teams
Attitudes	The attitudes of the team members and their effects on IPCP

Table 5.3: Overview of interview content

It is also important to recognise that semi-structured interviewing is a dynamic process that requires careful handling. On occasion, the scheduled interviews provided a useful framework for managing this complexity (Smith et al., 2010). These strategies were tested during the pilot phase, providing the opportunity to test the research questions and practice researcher interview techniques within an IPA framework.

5.6.1 Audio recording

Audio recording is a useful method for focusing on topics, questions and interviews (Kvale, 1996). In the present research it helped in notetaking and to help understand the participants' answers. Participants can feel uncomfortable with audio recording, so the researcher encouraged them to speak freely and feel at ease. The researcher had to meet some participants in informal settings such as coffee shops or public places, which negatively affected the quality of the tape recording. In these cases the researcher used his computer and phone to enhance the recording quality. Handwritten notes also proved very useful when transcribing and analysing the data. During the interview, the researcher would only write some keywords on the notepad so as not to interrupt the flow of the conversation.

5.6.2 Transcription

Kvale (1996) states that transcription is part of the interpretative process, which is the first step in data analysis (Kvale, 1996). All the tapes were transcribed verbatim. Transcription has been seen as a good method for examining interview data (Lapadat and Lindsey, 1999). However, the method does present the possibility of transcription errors, which affects the quality of the data. Recording quality might affect the interpretation of information, and all these factors affect the actual data (Easton et al., 2000). The researcher transcribed all the data using F5 software. Two factors increased the amount of time it took for the researcher to do this. The main one was that the researcher's first language is not English. This affected transcription time and quality. The other is that transcribing each one-hour recording took a couple of days to transcribe, which is why the researcher used a transcribing company to transcribe all the

data. The researcher used the F5 program to transcribe the pilot data, and only then realized how much time this would take. This was why he used a transcription company. He used his interview notes to follow up non-verbal clues from the interviews.

5.6.3 Developing usable conventions

The quality of data influences the quality of the research results. Mistakes in transcription may also affect the representation of participants' views (Hammersely, 2010). To avoid this, the researcher must go through the transcriptions thoroughly to ensure a deep understanding of the data. The best method of preserving the data "in a more permanent, retrievable, examinable, and flexible manner" is through audio recording and transcription (Lapadat and Lindsay, 1999). The key facets of transcription are language, reality and the researcher's role.

5.6.4 Overview of the data collection

The interviewees had confirmed their participation by mail (see Appendix 4). The aim of the study is to describe the professional experiences that people had lived, as part of the exploratory research. The researcher tried to find some factors surrounding the participants to facilitate the emergence of ideas and themes. This helped elucidate their perspectives on their lives in relation to experience while uncovering the essential elements. Five interviews were held by Skype video call. Even though this was convenient for the participants, it may have led to the obscuring of certain nuances best observed in a face-to-face interview. This issue was more pronounced in the phone interviews conducted with two of the participants. The majority were interviewed face to face. These interviews were better than the other two methods due to the ease with which communicative cues were communicated. Verbal and nonverbal cues were of utmost importance in the TA, as it required contextual clues as opposed to bland numbers. The audio for each of these interviews was methodically recorded before being boosted and made clearer using audio manipulation software. A semi-structured interview was used to aid the easy and free-flowing nature of the conversation needed for this research method.

In addition, the highly subjective nature of the qualitative approach obliged the researcher to make painstaking efforts to avoid any semblance of a predetermined agenda. The challenge was to accurately transcribe the audio recording, as some of the data might become lost in the process. The participants were given the questions beforehand so that they would be assured of the same. Some techniques were used in order to avoid negative connotations in the interviews by attempting to make the results replicable, meaning that future researchers of the same subject would generate the same information. To ensure that the researcher's conduct of the interview did not merely support his expectations, he tried to be systematic with his questions. Credibility also needed to be established when deciding the question types that would determine the responses. The chosen data collection methods would be extensively documented to allow readers easily to see how the data was collected and analysed.

5.7 Ethical considerations

The most important part of undertaking research on human beings is ethical considerations. These should be taken into account throughout the research process (Parahoo, 2014). According to Beauchamp and Childress, there are four points of ethical concern (Brikci, 2007). This study involves all of them: consent, anonymity, withdrawal and exploitation. DMU gave its ethical approval (See Appendix 2).

5.8 Informed consent

All the participants had to make informed decisions as to whether to participate in the study or not. Detailed information was provided to all the potential participants asking them to decide and inform the researcher via email or telephone (see Appendix 8: information sheet). In the interview, the researcher ensured that all participants had read and understood the contents of the information sheet and then gave them a consent form to read (see Appendix 5). They subsequently signed the consent form and a copy was given to them. They were informed of their right to withdraw at any time without reason. If anyone withdrew, their information was destroyed within one working day. This information was included in the participant information sheet.

5.9 Confidentiality and anonymity

All interview data was guaranteed to be anonymous. Each piece of data was labeled according to a coding system that included the date and the interview number in the same expression (e.g. Participant a 01 February 2015, Participant B February 2016). In order to help the researcher play the role of a participant in the interviews, the names of organisations, hospitals, colleges, clients, places and other locations were avoided. Researchers generally remove participants' names from the data to make it anonymous. Other related information such as job title, gender, organisation name (location) and club memberships must also be removed from the data to anonymize it completely. If such items were mentioned accidentally, the researcher was careful not to transcribe them. Names were not transcribed.

5.10 Data storage

Data management represents an important process in qualitative methodology, since it entails participant protection, confidentiality, record sharing, record keeping and data mining, all of which deserves the researcher's attention. The present researcher used a highly recommended data backup procedure that involved saving it onto three sources. The data was stored in a Passport-protected CD-ROM, memory stick and computer to prevent any damage or loss, using a special password for each data store. All these locations were password protected and could be accessed only by the researcher. Any documents containing information regarding the interviews or surveys undertaken by the participants were kept safely by the researcher. This also includes the consent forms completed by the participants, copies of which were kept by the researcher. All documents related to the participants were kept in secure files for a period of two years, as required by DMU.

5.11 Other ethical issues

The participants spoke with their line managers to obtain permission to participate in the study. The researchers advised the participants to obtain their managers' permission by using the Manager Information sheet. The researchers negotiated with the participants to determine the times and places of the meetings and to avoid unnecessary pressures on

their time. All participants were encouraged to seek permission from their line managers, since there might be an organisational policy against such research that the participants might not have been aware of. Also, since most interviews were conducted during working hours, informing the participants resolved any unnecessary issues with their managers. The places and times of the meetings were discussed prior to the interview as regards the feasibility and comfort of the participants, and the researcher made it a point to make the participants comfortable by giving them an initial survey to complete before asking the interview questions.

5.12 Researcher reflexivity

Smith states that reflexivity refers to two elements, those being researched and those doing the researching (Smith, 2008). Yardley's reflexivity has two principles that address the standard of qualitative research: coherence and transparency (Yardley, 2000). The main arguments in this field are that researchers can influence the research, which underpins the importance of the researcher and the researched. According to Starks and Brown Trinidad (2007), when conducting research, researchers must be honest, unprejudiced and open. In qualitative research, they must be objective about their assumptions, ideas and previous experiences, given their potential impact on the outcome. That is why the present researcher has commenced his thesis with personal background and information. He then described the theoretical assumptions of his research. This helps readers acquire a deep understanding of the background and provokes their thinking about the research process.

Following the interviews, the researcher discussed the process with the participants to examine their experiences of the interviews and to identify any changes or refinements that may have needed to be made. Based on this discussion, and the researcher's own reflections on the process, the IPA methodology was reflected upon as the identification of questions suitable as a basis for conducting discussions in the interviews to follow. However, this did not mean that all the interviews sought to explore different areas, as the researcher was mindful of ensuring consistency and the suitability of the questions. The researcher intended to build trust and rapport with the participants by articulating

clear goals, setting unambiguous boundaries, and remaining sensitive and empathetic to both verbal and non-verbal cues (Cohen et al., 2007). The researcher would also seek to be vigilant in detecting any apparent discomfort (Smith et al., 2010). Within an IPA interview framework, the relationship between researcher and participant was central to this study's success, as well as the quality of data that was likely to emerge (Alderson, 2004). This is because researchers tend to reflect their own beliefs regarding the research, with parallel dialogues within the interview (Lindlof, 2010). Furthermore, the nature of qualitative research is closely related to the research process and research participants.

The present researcher tried to minimize bias by randomly selecting and choosing semi-structured interviews. However, the researcher had experience of IPE and has carried out some teaching at different stages. That may have affected his perspective on IPCP. The researcher also paid attention to the research plan and data collection methods, along with other methods such as semi-structured interviews, which may have biased the researchers. In addition, audio recording techniques helped minimize the researcher's influence on the research results. The researcher did not know any of the SLTs who had participated in the study, another potential factor in minimizing bias. Furthermore, the researcher frequently met his supervisors and other researcher committee members to minimise biases and resolve the difficulties of others in this respect.

5.13 Quality, validity, reliability and trustworthiness

According to Smith, Flowers and Larkin (2009), IPA researchers must incorporate Yardley's principles for a better understanding of their qualitative research. The first of these principles is sensitivity. All researchers must be sensitive to sociocultural issues, exploring the existing literature and sensitively collecting data from the participants. The second is commitment and rigour, which is related to the quality of the interview and the questions. In the present study, interview questions were prepared by the researcher using open-ended questions and many related topics. This demonstrates the transparency and coherence of the present study, which conforms to all Yardley's

principles (Yardley, 2000). Moreover, the researcher and the supervisory teams ascertained the credibility and reliability of this research. According to Willig (2008), qualitative research focuses on a particular phenomenon, which it uses to understand the whole population. Unlike quantitative research, it does not aim to investigate large numbers of the subject population (Willig, 2008). According to Silverman, qualitative research design must be applied correctly in order to generate reliable results.

The reliability of this research also depends on triangulation methods. The researcher examined this after a peer review, giving the same transcription to the academic tutor for her analysis. Both peer researcher and academic tutor obtained the same results as the present researcher. All these themes had been identified in the text. Both the peer researcher and academic tutor agreed on the themes identified by the researcher. Generally, in the nature of IPA, another researcher may identify different themes. However, in this research there was no difference between the researcher's themes and those of the others. In addition, according to Shenton there are many critics of qualitative research's trustworthiness. Some believe that this cannot be honestly established (Sparkes, 2001). However, this methodological framework and systemic data analysis shows the trustworthiness of this research and addresses issues relating to validity, quality and reliability prior to the research process.

5.14 Research bias

Two types of potential research bias have occurred in this research. The first is the bias of participants and their positive perspectives on the research. The second is the positive perspective of participants regarding IPE and IPCP. The researcher was aware that voluntary participants are not impervious to the bias towards a positive experience with this research. As a part of the methodology, and in order to draw the right conclusions, the researcher can influence the results to reach a particular outcome. Some bias can also stem from experimental errors, when not all variables are accounted for. For example, researchers manipulate the sample data and only those sets of participant data favourable to the desired results are validated. Some bias is unavoidable, and researchers should be aware of this and seek to reduce its effects. Thankfully, research

bias can be completely removed from quantitative research methods. However, in the case of qualitative research, research bias is inevitable. The researcher reminded the participants that there were no right and wrong answers, and that they could point out whatever they thought was wrong with the research. Being part of this research for most participants enabled the researcher to better understand the deep-rooted academic challenges of SLT. It can be argued that participants may have some positive experiences of IPE and IPCP. However, the researcher recruited the participants through emails. He did not know anything about them. When the participants received the emails, most offered suggestions regarding the current research rather than simply approving it uncritically. Some of the transcriptions make it evident that the participants were critical of IPE and IPCP.

5.15 Summary of the chapter

This chapter has provided detailed information about the philosophical, strategic and methodological frameworks of this research study. All the frameworks have been covered in this chapter and the strengths and weaknesses of the relevant ones have been discussed. The chapter discussed the influence of the phenomenological approach to research design and justified the use of qualitative research as well as describing its impact on the current research. Subsequently, the chapter provided some detailed insights into the pilot study along with the main study design, sampling procedure, ethical approval and data collection stages.

CHAPTER 6: ANALYSIS

All the data analysis, management and interpretation conducted in the research are described in detail in this chapter. The extent of the influence that the philosophical framework exerted on the analysis of data as well as the underlying objectives of the analysis is also outlined. The use of software to manage qualitative data, along with the processes and framework of analysis, is mentioned later in the chapter. The documentation of TA has been methodically carried out using very specific, clearly delineated steps. The processes involved at every stage have been substantiated. This is in conjunction with the desire to preserve the highest degree of transparency in the documentation of the analytical processes. The recursive nature of this research is evident throughout this work, even though most of the stages, such as the advancement of research from the procurement of data to the rigorous nature of data analysis, are linear. Qualitative analysis is subjective and personal, particularly in this case. Great care was taken to adhere to the research objectives by keeping the research questions highly relevant to the research focus.

6.1 Data analysis of qualitative research

The analysis of qualitative data entails some challenges, as there are different ways to analyse qualitative data, such as thematic, descriptive and phenomenological, as well as more thorough methods including discourse analysis. IPA is "a systematic and practical approach to analysing phenomenological data" (Barker et al., 2002 P18). These phenomena are generally related to an individual's experience of some life activity or significant relationship (Smith, 2004).

IPA methods for data analysis are generally used for comprehensive analysis of interview data. For the present research the researcher used the IPA principle as a baseline, although he employed a TA framework to analyse data because of the high number of participants, which would make it hard to fully analyse all the data that did not pertain to the aim of the current research. On the other hand, TA is a common qualitative approach in academic discussion. Braun and Clarkes' (2006) guide for conducting TA has strongly influenced the process of data analysis. According to them,

the main processes involved in analysis are based on these analytical aims:

- to interpret the data in order to obtain the meaning inherent in it
- to familiarize the researcher with the data at a deeper level
- to give individual attention to each of the transcripts and to explore the underlying ideas within them
- to understand what binds the entire dataset together as a unit
- to observe and recognize patterns in the dataset
- to define and refine themes
- to construct a framework to demonstrate the relationships and patterns present in the data
- to develop and explain the conceptualisation of emergent ideas
- to create a theoretical narrative that explains the various frameworks coherently
- to explain the phenomena present in the dataset

The research data analysis process in the present study conforms to Braun and Clarkes' aims of data analysis, including the process of data analysis in which the researcher has engaged with data more deeply, obtaining an individual understanding from transcriptions of individual interviews as well as a broader understanding of the whole dataset. He had acquired a more intensive understanding of the data analysis process and frameworks, with some reflection on the process and on data patterns.

Reflexivity in the interpretation of this subjective data enables researchers to become more engaged with it. Grbich (2012) suggests that researchers should attempt to relive the process as if the data was being interpreted in front of them. This has the effect of drawing researchers into the data, thus facilitating the direct assessment of the phenomenological approach to the research. Attempts have been made to interpret the interviews, as they were actually experienced. Data is often needed in order to shift perspectives during the phenomenological reduction. As discussed in the methodology chapter, it was difficult for the researcher to determine the influence of his own preconceived notions and prejudices regarding the study. He chose reflexive bracketing, as this did not require the complete elimination of subjectivity from the study; rather it

demands that the researcher consider it and reflect upon it. Bracketing is important because when researchers engage with data for a long time, their perspectives on it become more subjective.

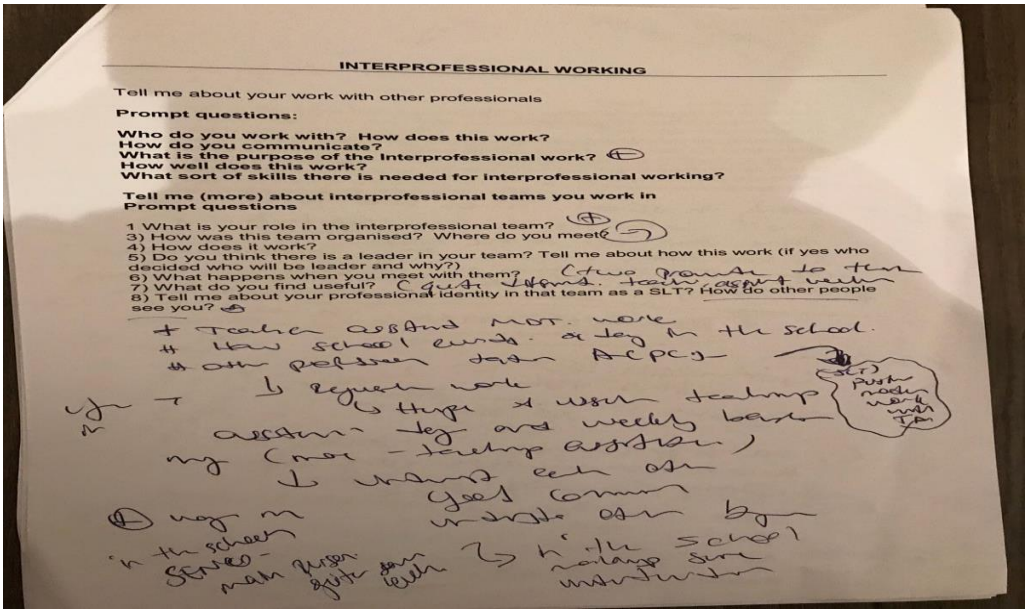


Image 6.1: Researcher's handwritten notes

In image 6.1 the researcher's handwritten notes show possible interview questions with notes made while the researcher was audio recording. The researcher noted keywords and sometimes some background regarding the interview. This includes approaches and attitudes along with relationships and samples. Through the data analysis, the researcher has been reflexive with the data and his own subjectivity at various critical points throughout the thesis. He used memos and a bracketing journal in order to avoid bias. He also took notes about the data collection and data analysis steps on a regular basis. With notes the researcher was able to decipher his bias and individual perspectives along with its effects on the interpretation of the data. At this stage, the researcher used field notes while interviewing the participants.

6.2 Analytical framework

The principles of phenomenological analysis (Smith, 2010) were used as a philosophical guide to data analysis. Braun and Clarke's (2006) advice for the TA was used as a reference resource. According to Grbich (2007), the outcomes of analysis are the "interpretation" of the participants' subjective accounts, perceptions and social experiences.

6.3 Aims of the analysis

The aims of analysis are to interpret, engage and explore transcription individually, and to make a connection between a dataset and the entire body of collated data. Perceiving the main trends within the whole picture and understanding the relationships between the data in the context of the thematic framework help develop a general concept. Furthermore, developing and explaining abstract theoretical concepts and making a connection between theoretical frameworks provides an explanation of the phenomenon, which is represented in the dataset in its entirety.

6.4 Thematic Analysis (TA)

The researcher selected TA for the purpose of data analysis because it presents the richest and most flexible opportunities for analysing data (Howitt and Cramer, 2008). TA is widely applicable to various perspectives within qualitative research, regardless of whether they are philosophical or methodological (Braun and Clarke, 2006). In addition, TA helps make sense of interview data and is thus quite suitable for the present research objectives. Themes and codes are the prime focus areas of IPA and TA because they directly reflect the original data. TA is based on the researcher's interpretive processes. The researcher is tasked with identifying recurring ideas and meaningful units of data, and then developing related themes. Inductive research was conducted, which then generated theories in the process of formulating thematic frameworks. The resulting theoretical constructs were conceptualized at an abstract level. These constructs served to describe the highest levels of abstract nodes and to classify categories of nodes. Auerbach and Silverstein (2003) suggest that the theoretical narrative signifies the network of themes and theoretical constructs

representing how the researcher connects themes, subthemes, abstractions, contexts and concrete examples from the data. TA is generally used to organise data from interviews (Riessman 1993). Because the process of defining and interpreting themes is a highly personal and creative one, it is imperative that the entire process is transparent. Key themes emerged from the present data. They can be explained as concepts, trends, data, ideas or distinctions that emerge directly from the data. Subthemes are essentially themes within themes (Braun and Clarke, 2006).

The TA used in this study was influenced by an interpretive phenomenological approach and facilitated by the use of QSR NVivo 10. TA is the developing interpretation of raw data and the gradual analytical progression from patterns or themes to wider abstractions and concepts. Providing a narrative that explains these themes will conclude this process. Using TA the researcher divided the text into manageable levels (Braun and Clarke, 2006), all the while keeping the original objectives of exploring SLTs' experiences of IPCP and IPE:

- To investigate SLTs' attitudes and views of their pre-registration preparation for IPCP
- To evaluate the body of knowledge regarding IPCP and IPE
- To explore the roles taken by SLTs in various interprofessional contexts, and their team experiences and roles
- To evaluate the views of SLTs as well as others on teamwork
- To elaborate on SLTs' experiences of their relationships, communication types, obstacles and hierarchy with other team members

Before data collection, every researcher has some ideas regarding data analysis. Another important requirement is to engage with the data before starting the analysis while ensuring that the data is in fact suitable for answering the research questions. The main aim of data analysis is to engage with the participants' experiences and interpreting those accurately using appropriate methods.

The researcher identified deep levels of engagement with the transcripts. During the first step of the analysis he attempted to identify the recurring ideas and patterns for finding "units of meaning" (Cohen et al., 2007). Later, the researcher tried to determine the "shared meaning". These processes are affected using software that facilitates a thorough analysis of data to generate themes. According to Braun and Clarke (2006), themes capture something important in the data relating to predetermined research questions. They represent a level of patterned meaning or response within a dataset, sometimes occurring within the overarching structure of larger themes.

6.5 The data analysis process

The analysis of interview data was repetitive in nature. The stages of the analysis process were reviewed repeatedly in order to define, refine and adapt new information generated from the interview in terms of contexts. The procedures can be deemed as suitably based on the marriage of design and data collection in relation to the assumptions of the procedure. These may be used for the research methodology, code selection and data analysis. It is very challenging to undertake the transcription of complex data.

Data analysis steps

1. Transcribing
2. Inputting data into NVivo10
3. Reading and re-reading to categorize the data in NVivo10
4. Printing the transcriptions in the form of six booklets
5. Reading, rereading and taking notes on the booklets with coloured pens
6. Organising relevant data pursuant to the rereading process
7. Printing the organized data
8. Cutting out relevant quotations with scissors
9. Matching relevant cut quotations with relevant themes and subthemes
10. Using coloured paper to develop themes and subthemes mapped against key quotations

11. Using these theme and subtheme maps to understand the relationships between themes and subthemes
12. Finding relevant quotations and organising themes into subthemes using NVivo 10
13. Printing the last version of the themes and subthemes with quotations via NVivo 10
14. Reading and re-reading the final version
15. Reading and rereading by supervisor's teams
16. Using triangulation with external help to read and re-read the themes and subthemes
17. Final changes and production of the final version of the themes and subthemes
18. Writing up of the findings chapter and research results reports

Since the understanding of the research question might differ from researcher to researcher, drawing conclusions with a common ground is quite difficult to achieve. All the raw data from these transcripts were compiled into a Word file. The sheer amount of data was an obstacle simply to data compilation. The data was then arranged in columns so as to reduce the page spread. However, it still took all of 500 pages, which were then divided into six booklets.

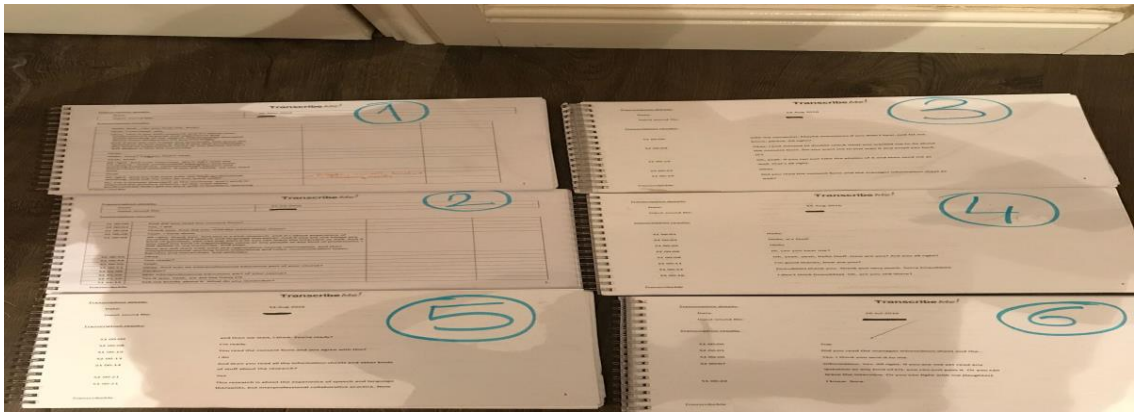


Image 6.2: Six transcription booklets

Image 6.2 shows the data transcription booklets. The researcher printed the transcriptions and made six booklets that helped him organize data and make notes for the analysis process. Denscombe (1998) highlights the need for identifying "units of meaning" in the data. The researcher went over these booklets, one page at a time, to identify themes and contexts in the data. The same documents were repeatedly analysed to find any information that might have been inadvertently missed the first few times. He methodically re-read the data to familiarise himself with it. This familiarity was of immense significance, as the quality of the analysis is strongly influenced by the quality of the data itself. In order to carry out data analysis, it was therefore necessary for the researcher to arrive at a deeper understanding of the subject matter. In the repeated examination of the data, the importance of obtaining "meaning" in relation to the research questions was pointed out. Some passages were then marked as data of interest, from which key ideas would be gleaned. A record was kept of these ideas. Additionally, the data was colour-coded in order to conceal names, identities and workplaces. All the information was then used to develop codes, as well as a thematic map that would later be used to facilitate data analysis (See Appendix 12).

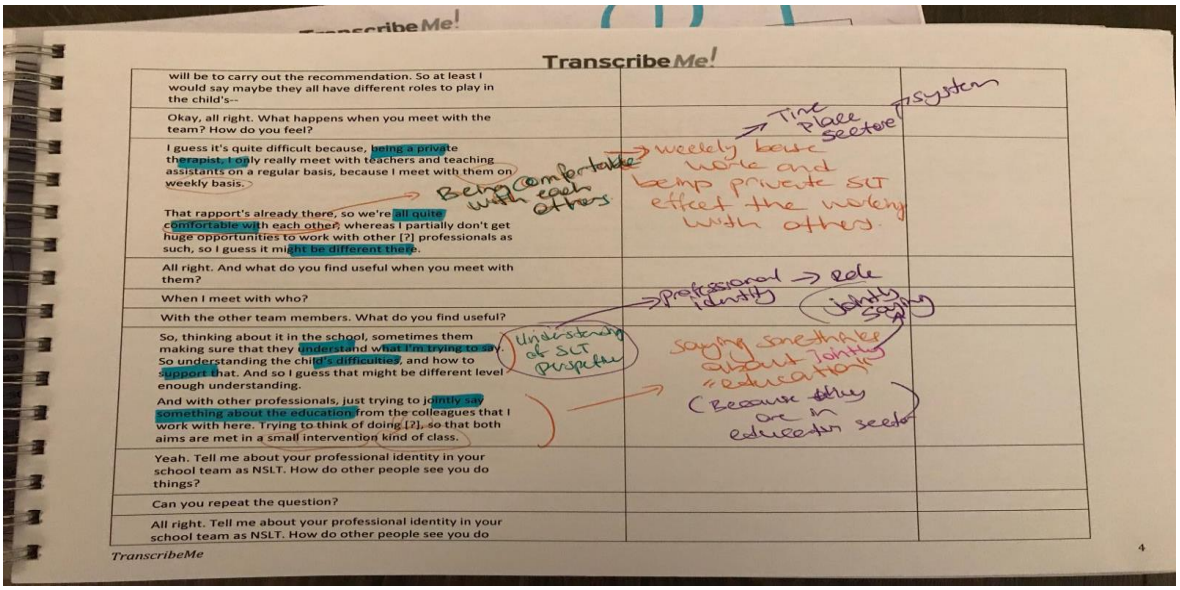


Image 6.3: Reading and note taking

Image 6.6 shows the transcription reading process, using coloured pen and making notes from the key words on the quotations. The researcher used these to make initial notes and analyse the data.

6.6 Initial coding

The first stage of analysis is to engage with individual transcripts. This enables the development of a complete picture and allows the researcher to be familiar with the data after reading and rereading. Coding stems from reflection on and analysis of the process of reviewing the remaining thoughts and ideas, as well as entering reflections in the research journal on a regular basis. This data was transferred to NVivo 10 on a Macintosh computer. Macintosh formats were adhered to and the codes/themes map was added to the format. This data was then analysed on the Macintosh version of NVivo 10 to enable the coding and tagging of similar passages with respect to both meaning and context.

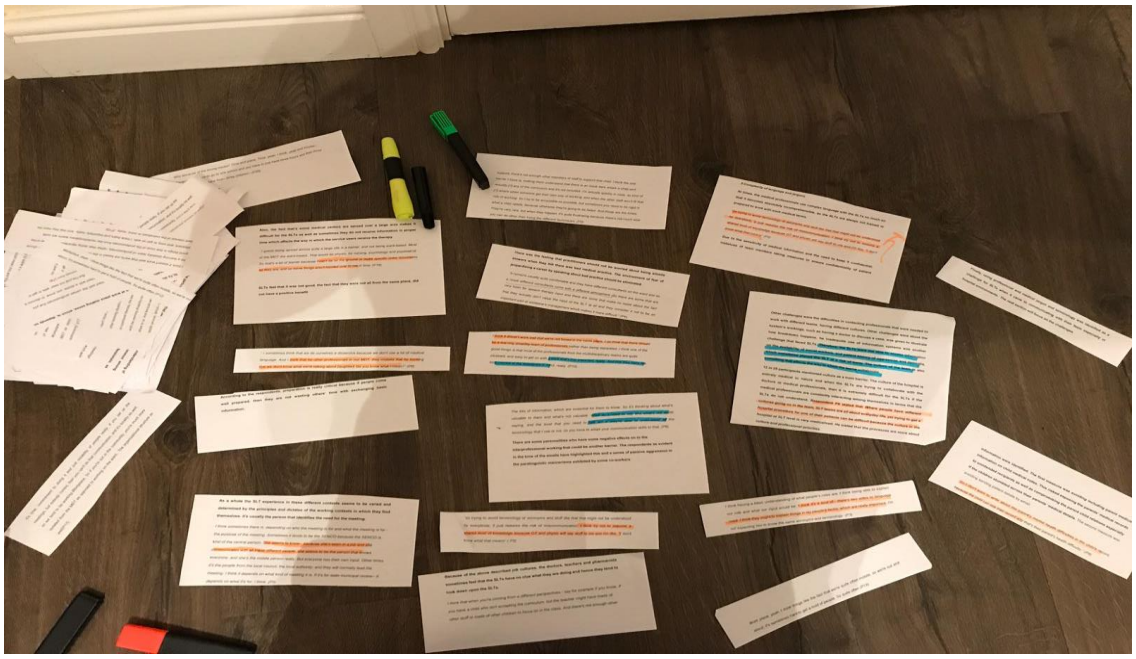


Image 6.4: Nodes

Image 6.4 shows the quotations, codes and themes obtained by explanations from transcriptions. The researcher used this technique to match quotations with suitable themes and subthemes. The reason the researcher chose this technique was that it is easier than the using NVivo or word documents. The data was entered into the Windows version of the same software to shape all the codes with themes. The nodes created acted as tags that helped organise the passages in the order of meaning and contexts. They depended on the researcher's interpretation of a phrase or sentence. A broad-brush approach could not be used on this particular analysis because of the variety of emerging themes that had to be carefully examined with great attention to detail.

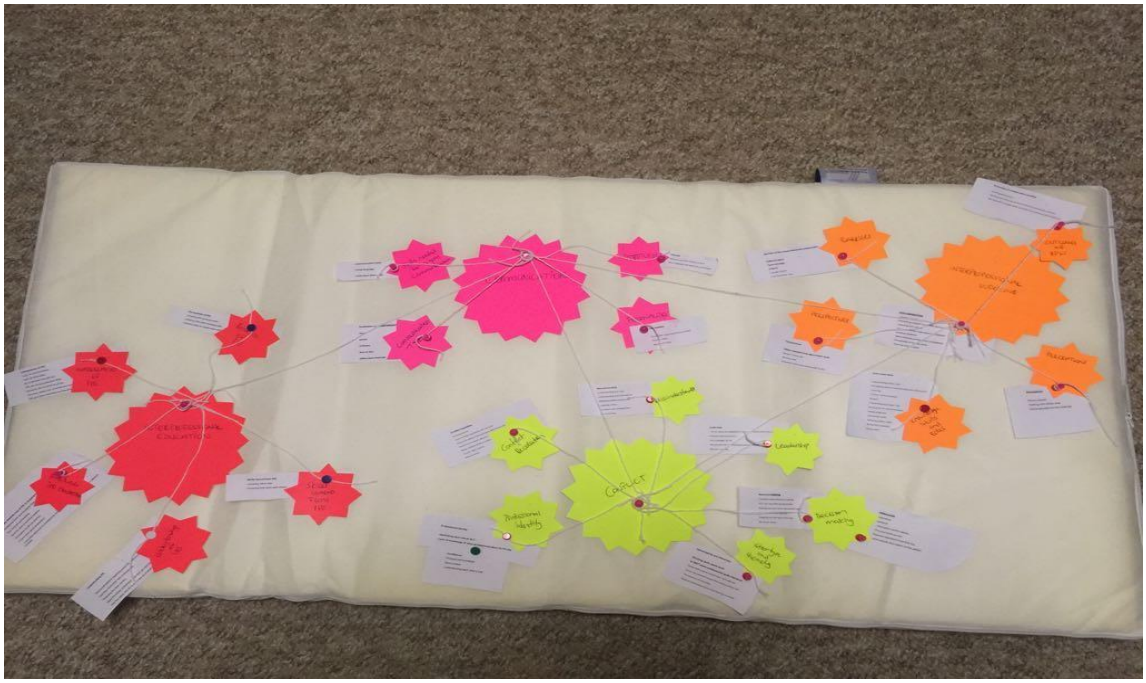


Image 6.5: Nodes in general

Image 6.5 shows the main themes on large cut outs and subthemes on small ones, all of which contain some description on attachments. This was an early version of the themes and subthemes, which was subsequently altered on more than one occasion.

6.7 Coding down

"Coding down" means carrying out an analysis at the level of individual sentences within individual transcripts. According to Grbich (2007), the coding of raw data can make it more manageable and organised. This coding down was followed by coding up, a process by which the researcher sought to distance himself from the data in order to avoid possible bias and other errors. Coding up was done by abstracting raw data with the intention of attaching a collective meaning to the underlying data.

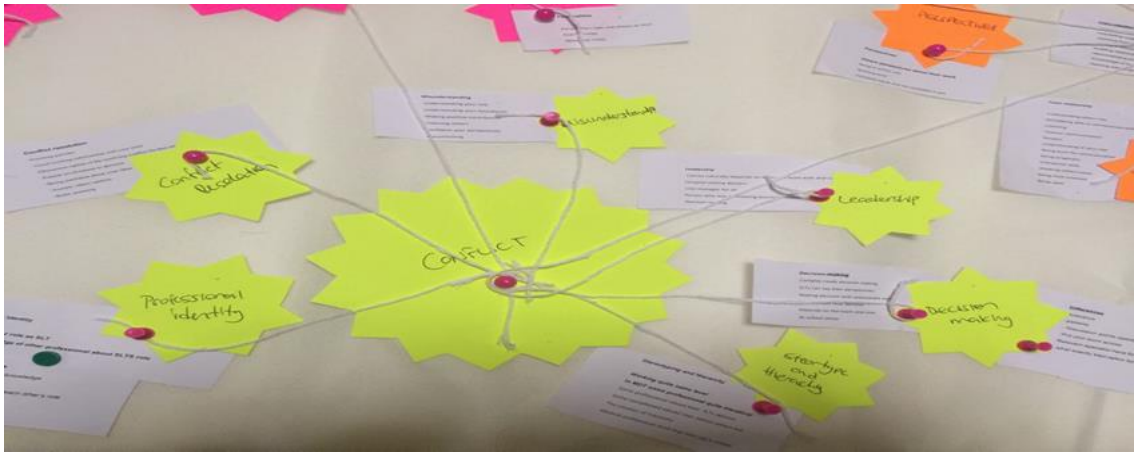


Image 6.6: Some codes

In Image 6.6 the researcher has used codes and notes to understand the relationships between the various codes, notes and themes. The link between themes and subthemes and the example quotations are attached to the subthemes. This helped the researcher to move subthemes and quotations around the themes and subthemes in order to find their proper place. This stage of analysis is necessary according to Gilbert (2002) to assist in broadening analytical perspectives. This would help group the ideas together to create an overarching theme. The coded data was copied onto another Word document and key themes were highlighted. These themes were then reorganized to fit into the themes chapter. After familiarisation with the content of the transcriptions, the process of working and manipulating the nodes to classify groups of contexts, as well as the ideas within a category of patterns across the dataset was followed.

6.8 Use of QSR NVivo 10 for computer-assisted qualitative data analysis

The use of this software programme aided the handling of raw data and helped organise the concepts and ideas revealed within the data. As Kelle (1995) states, QSR NVivo facilitates the management of data intelligently and facilitates the easy storage and rapid retrieval of information. The decision to use QSR NViVO 10 was guided by its suitability for the management of data of this kind. This software was used to document the process. It reinforced the reflexive bracketing processes and enabled transparency. The aims of this study and the philosophical and methodological frameworks that were set guided the use of the software. The software for TA is NVivo 10, which was used by the researcher for data management and organisation. However, extensive discussions and the variety of expressions used by SLTs in some contexts obliged the researcher to use a traditional read and reread thematic data analysis model with coloured pens.

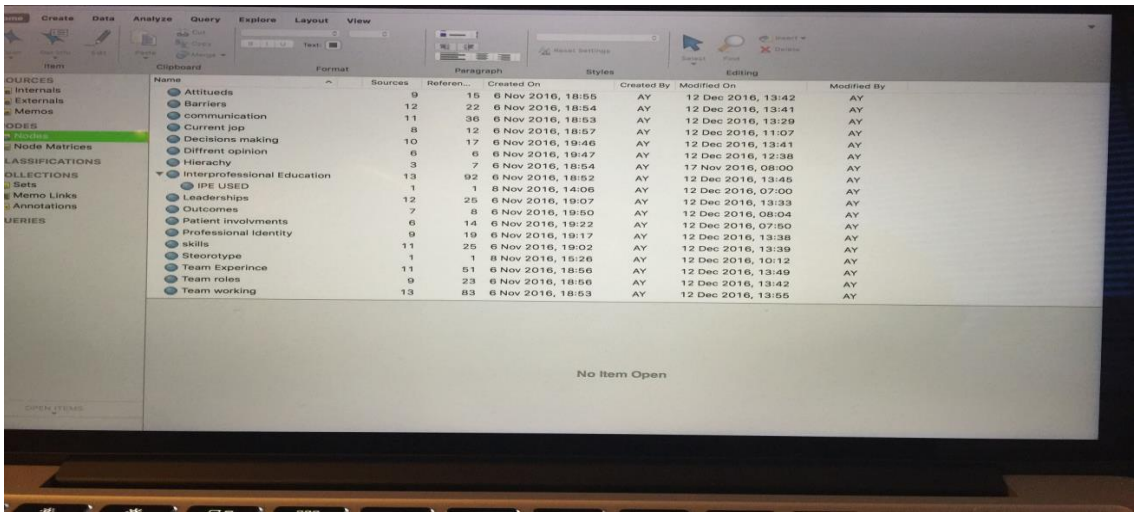


Image 6.7: See screenshot of the NVivo 10 for MAC

Image 6.6 is a screenshot of the NVivo 10 notes and data management. The researcher organised his data using NVivo 10.

6.9 The development of themes, subthemes and theoretical constructs and the establishment of hierarchical systems within the data

The nodes were reorganised under abstract headings. The node system was to be manipulated or "pruned" to reduce the data to a set of extreme relevance. This was done by eliminating or merging nodes with overlapping meanings or very similar contexts. The ideas that were reflected in more than one node were collated to avoid redundancy. Some passages were recoded to better fit their node. After the condensing of the node system, each node title was reviewed to check for the appropriateness of the titles. The aim of condensing this structure was to increase the level of abstraction. This process could be concluded only if the researcher saw that the nodes were prevalent throughout the dataset and relevant to the research objectives. This shows that the process was recursive, as during the refining of data the researcher was still searching for newly emerging ideas and contexts.

These ideas were reinforced and then adapted into the ever-growing body of information. This refinement of the node system prompted the researcher to exclude any irrelevant data. Any data that could not be used for further research objectives was eliminated. The refined node system was further analysed using NVivo10 to check prevalence by observing the nodes that linked back to the greatest number of transcripts. These nodes were compiled into a new list of candidate themes, which were then organized, manipulated and reduced in order to create the finalised themes. A framework of these themes and subthemes was then created.

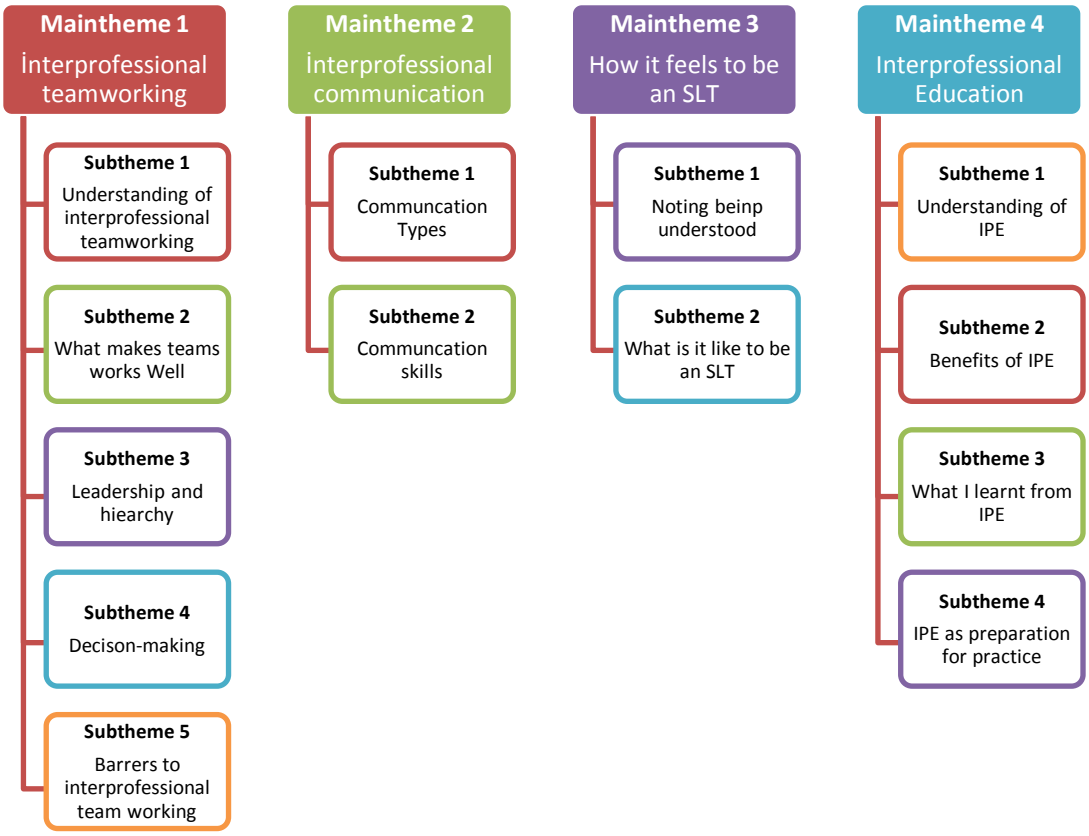


Figure 6.1: Themes and subthemes

This framework has been created to describe the various connections between themes and subthemes. Abstraction was given the highest priority, and the most abstract of the emergent themes were placed on the highest level of the framework. All the subthemes that were related to these themes are listed below. As one proceeds down through the framework, the themes become more concrete and the examples more specific. The framework was instrumental in visualising the vertical and horizontal relationships between the themes. The researcher began to recognize and interpret possible theoretical concepts related to the thematic framework. The interpretation of ideas and experience within the framework involved reorganizing the wider grouping patterns in the data. The researcher explained, interpreted and identified this wider data, with abstract processes affecting the grouping of the themes. This concept will be discussed in the Findings chapter. The thematic framework was refined, and the researcher explains the theoretical explanation of the relationship between the themes.

6.9 The interpretation of non-verbal cues in interviews

The research relates to the experience and attitudes of participants who were interviewed. The transcriptions and audio recordings were evidence of the verbal accounts given by participants and their attitudes concerning the research questions. However, the communicative value of nonverbal cues, none of which were audio-recorded by the researcher, was not observed during audio recording. That is why the observation and interpretation of nonverbal clues were noted in the interview field notes. The researcher used an interview framework sheet with some blank spaces on which he entered nonverbal cues.

6.10 Being reflexive during the analysis process

During the analysis, the researcher engaged with the data by reading and rereading it and entering it into NVivo. This engagement with the data gave the researcher an opportunity to access the phenomena directly and to attempt to interpret them (Van Manen, 2002). The researcher sometimes requires time away before re-engaging with the data. The researcher reflected that it was not possible for him to completely remove his effect on the analysis (Gearing, 2004). Reflective bracketing requires the researcher to acknowledge and reflect on his influence while preventing data manipulation. It was not a case of eradicating preconceptions and experience. For Dowling (2007:136), reflective bracketing is essential if the phenomenological influence on analysis is to be demonstrated. In the methodology chapter, the researcher explains his reflection and potential influence on the research. At this point, the researcher's reflections on data analysis and the influence of his reflective approach were of critical significance to the analysis (Gearing, 2004).

The reflective process also worked on the interpretative process. The researcher was reflective when critically interpreting the data and reengaging with transcripts and notes after a period of disengagement. This break was part of the analysis process, proving helpful in obtaining an overview of the themes. The researcher also used the break to try to avoid referring to previous experiences and knowledge of the research topic. The reflective process of data analysis continued with conceptual linking, which pertains to

the substantiation of dominant themes' interpretations. The researcher tried to observe and record the processes carefully, by judiciously focusing on previous and later features of the research and attempting to discern their patterns, thoughts and evidence. This happened quite often. Sometimes he closely examined individual transcriptions (close analysis) before examining the dataset as a whole (analysing from a distance). For the latter, the researcher moved away from the computer and made some handwritten notes as well as observations about the dataset as a whole on paper. This distance analysis was repeated at various stages of the research, which helped the analysis process and brought about a change in the natural part of the research process, facilitating reflexive bracketing. Working at a distance from the data allowed the researcher to identify aspects that required further exploration and deeper interpretation. This then diluted the impact of the researcher's own beliefs and presuppositions. The researcher continued this interpretation of the grounded data until he was satisfied.

Analysis and reflective bracketing continued till all the themes, together with the conception of the entire thesis within the theoretical framework, were uncovered. According to Grbich (2007:39), the phenomenological approach's main outcomes were "a description of the structures of consciousness of everyday experiences as experienced first-hand". The researcher ensured that the "voices" of the interviewed were heard by developing findings grounded in the results collated from the raw data (Schratz, 1993). The process of analysis required a well-documented and transparent interpretation of the participants' accounts.

6.11 Ensuring transparency

The researcher tried to document all the processes of the study using field notes, memos and the university's monitoring system. Not all decisions were made on the basis of individual feelings, ideas, observations and interpretations. However, field notes were not used as raw data; instead, they were used to record the research process from the beginning because the transcription data used for analysis employed field notes as a background.

6.12 Summary of the chapter

This chapter has discussed the various stages of data analysis, from interview to transcription to the analysis in NVivo. The onus of data management was on the software, QSR NVivo 10. The researcher elaborated his methodology, taking pains to outline the various details involved in each step by scrupulously checking the relevance of the data with the research questions and optimising the collation of the data accordingly. The generation and advantages of a theoretical framework were also discussed while describing the collation of information under various titles. The next chapter will present the findings of this research with the use of TA.

CHAPTER 7: FINDINGS

This chapter will present the results of analysis of the interview data, which led to the development of the themes and subthemes introduced in this chapter. These themes and sub-themes are presented hierarchically to demonstrate their relationship with each other. The passages of data are referenced by the interview code transcripts. For example, the code for Participant 1 will be (P1). A thematic framework was applied in the analysis of the interview data. The findings will provide a theoretical framework that incorporates the thematic framework, which is meant to demonstrate a unique interpretation of the data. The process of developing and consolidating findings is evaluated in other chapters. This chapter commences by introducing the findings. The themes that have been developed will reflect the trends and relationship within the dataset. These themes were developed according to their prevalence across the data based on the researcher's interpretation of the evidence. These themes represent recurring ideas and patterns within the data and as well as units of meanings interpreted by the researcher. The connection between the themes and subthemes will be discussed later in this chapter. The following section begins by presenting the demographic factors relating to where SLTs work, whom they work with and their typical working patterns.

7.1 Description of participants

21 SLTs consisting of 19 females and two males who had graduated in the last five years from DMU participated in the study (see Table 2.6 on participants' information). They worked in a variety of sectors and settings with various client groups. Three of them worked in the independent sector, four each in health and social care sector, and five in education and social care. They work in the following environments:

- Private primary schools
- State primary and secondary schools
- The Stroke Association
- Local authorities
- General Hospital
- Children's centres and partnership trusts

- Rehabilitation centres
- Learning disabilities centres and paediatric clinics

Of 21 SLTs, eight worked with children and adults and five worked across public and private sectors, a clearly complex working pattern. One SLT worked in a brain rehabilitation centre, which is her speciality, while another worked with all age groups. The SLTs generally worked in two or three places on various days and with a variety of professionals. For the following participants, the typical work pattern included visiting clients and workplaces, patients' homes, school wards and other facilities, as well as interacting with other team members and preparing detailed notes at the end of the day.

> *I always spend the first part of Monday morning MDT (multi-disciplinary team), so that's where we meet with all the other therapists, that's OTs, psychologists, neuropsychologists and the nursing team, and some of the people who interface with the CHC, which is funded effectively, and also with the doctors. There are two doctors. One's virtually residential, and there's another one who comes in two days a week. He's a psychiatrist. So that's the first meeting of the week, and then I normally have three more sessions with residents that day, so I have one late morning and then two in the afternoon. Then the following day, I should normally have four sessions. All those sessions are usually face-to-face, but I have one, which is called Social Group, which I run with the OTs. It's a social group with the residents. It's usually a group of about between five and seven residents, and I run that with the OTs and neuropsychologists. (P22)*

In their day-to-day activities, SLTs work collaboratively with many professionals. 20 participants mentioned that they interact and work with other professionals from various fields.

> *The main other professionals that I get to work with are teachers, teaching assistants, and parents. (P8)*

This statement reveals that interprofessional coordination mostly happens between specialists and other practitioners, such as between SLT specialists and psychologists,

and between ASD specialists and paediatricians. However, interaction can also take place between therapists and other professionals. The primary remit of SLTs is to assess, diagnose and treat. Most of the participants stated that they usually saw patients in their own homes, schools, hospitals and rehabilitation centres to carry out assessments, including oral and communication assessments, as well as some therapy. They would also visit the ward and MDT and hold meetings with other professionals. The core objective of the SLTs' work was to formulate care plans, provide SLT and swallowing therapy, produce reports, train other professionals and provide support to care and therapy givers. 12 of the 15 participants agreed that the leading role of an SLT is to assist their clients through active therapy.

> *My role is to look at the individual from a SLT perspective, and to give opinions and results from assessments that he/she would have done and explain what that meant to the patients. (P10)*

The roles played by SLTs were to coordinate patient care and provide professional input.

So my role is more to train up teachers and teaching assistants so that they can carry out the intervention. It works well like that. (P14)

SLTs work with various professionals in a range of settings. Figure 7.1 shows the three examples that illustrate the variety of SLTs' working patterns. P1 worked in two education services, one a special school, the other a primary school. In both types of setting, one worked with two teams in two schools with different professionals. At the special school, for example, she worked with the head teacher, the special education needs coordinator (SENCO) and the special education needs teacher. At the same time, in the primary school she worked with the class teacher, the head teacher and the educational phycologist. P5 worked in a health and social care setting. In health care, P2 worked in a hospital with ENT specialists and nurses, doctors and dieticians. P5 worked in schools with social workers and nurses and P22 at a school and a residential home, where she worked with the nurse and the social worker. In the school, P22 worked with teachers and the Occupational Therapist (OT).

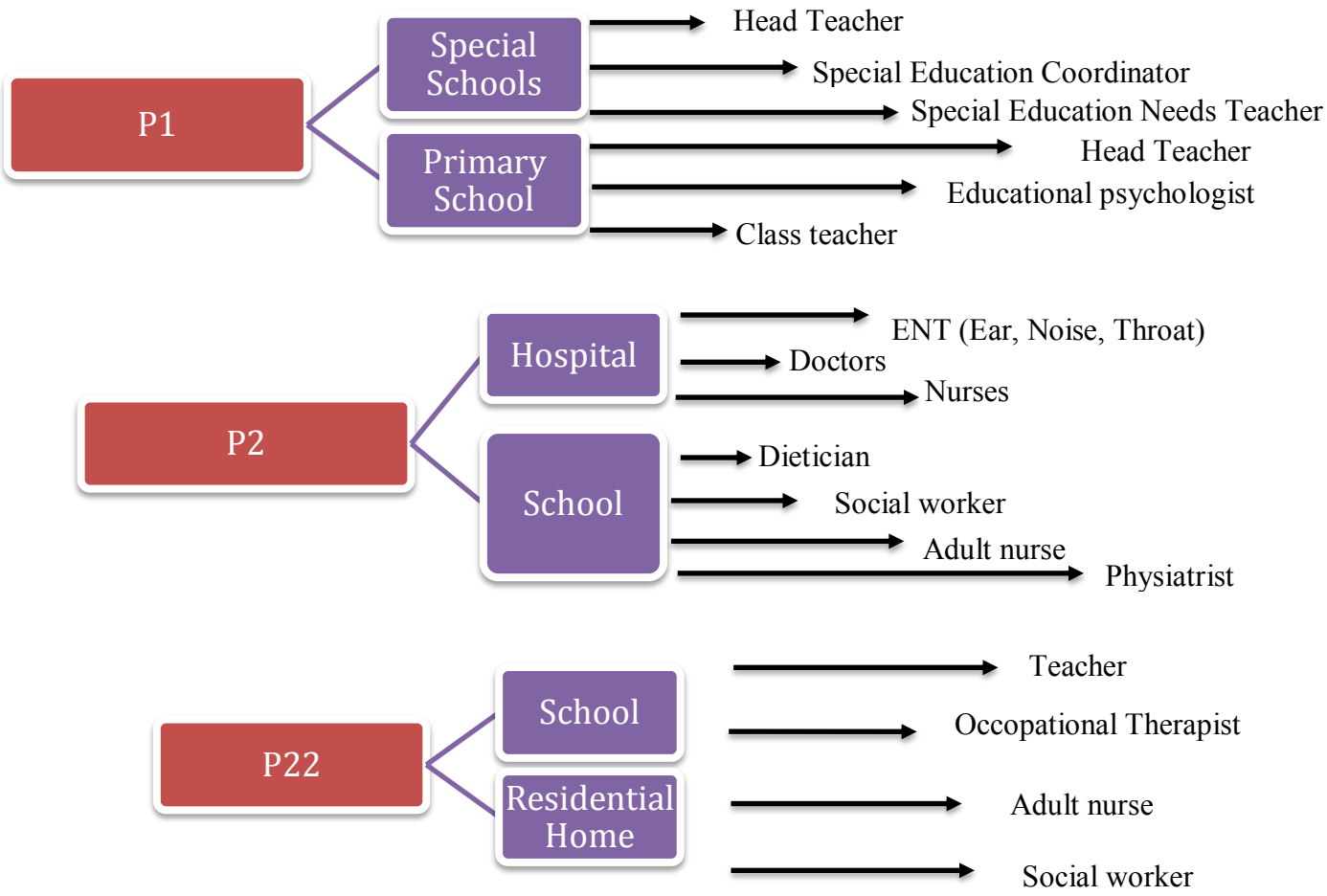


Figure 7.1: SLT working matrix

Overall, participants said that SLTs must work with a variety of clients and professionals in a range of sectors and locations in the course of their work. The next section will focus on the themes and subthemes emerging from the interview data.

7.2 Themes and subthemes

Four main themes emerge from the interview data. The first one is interprofessional team working, which has five sub-themes. The first is understanding interprofessional team working: what makes the teamwork well, its leadership and hierarchy, the decision-making process, and the obstacles to interprofessional team working. The second theme is interprofessional communication, which consists of two subthemes: communication types and communication skills. The third theme regards how it feels to be an SLT and the fourth IPE, whose four subthemes are the understanding of IPE, its benefits and limitations, the skills learnt from it, and attitudes to the role of IPE in preparation for practice. The figure below shows the themes and subthemes emerging from the data (see Table 6.1)

7.3. Main Theme 1: Interprofessional team working

Most participants directly and indirectly mentioned interprofessional team working. They used phrases like "share information about a patient", "you have a holistic view" "joint working" and "really good for perspective taking and looking at a patient holistically" to describe their understanding of interprofessional team working.

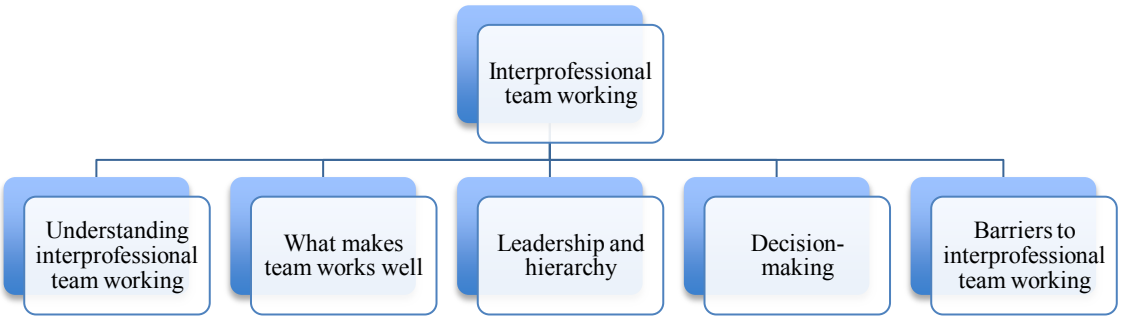


Figure 7.2: Main Theme One: Interprofessional team working

They also used phrases such as “firstly I need to learn my boundaries and roles”, “being aware of each other's roles”. They also used terms such as “there are perhaps some members who are quite hierarchical”, “it depends on my particular role for the client”, and “I feel it is quite equal” to explain their experience of leadership and hierarchy. They also mentioned some terms for decision-making like “make a decision from there jointly”, “it's usually the best interest decision", and “getting everybody's opinions together and coming to an agreement”. Finally, they used terms to explain their experience regarding barriers of interprofessional team working such as “I don't feel like we integrate very well into health services”, “if you're out in the community, you're much more isolated”, and “I guess being spread across quite a large site is a barrier”. The next part will focus on these subthemes, with more quotations and interpretations.

7.3.1. Understanding interprofessional team working

Most of the participants stated that their understanding of interprofessional collaboration involved providing the best services for their patients by sharing patient information with other professionals. However, this process was not regarded as an easy. The complexity of work settings and interprofessional relationships made the information process more challenging. The complexity issues will be explored in more detail in the discussion chapter. In this section, the researcher will mention complexity under each theme, and subthemes, which involve complexity.

SLTs explained that their understanding of interprofessional working involved “sharing information on the patient”, “best service for the patient” “you have a holistic view”, and “joint working”. This shows that they have put patients at the heart of their practice; the phrases “holistic view” and “joint working” express their feelings on interprofessional working. The following quote suggests that a practitioner usually refers a patient to another practitioner if the second can provide the best service. For example, an SLT may ask for a second opinion from an OT or PT with reference to a particular patient. This clearly shows that working with other professionals, sharing patient information and working with and learning from each other, was essential for them.

> *So, if someone's deteriorating in physiotherapy and that correlates with a deterioration you're seeing, you might be looking at getting more tests done or having a look why, medication. Knowing about that's important. Joint working. Often, we do a lot of joint working with physios and OT, especially around cognition or seating positions.* (P2)

Some detailed comments regarding the SLTs experiences and views generally revolve around building relationships, demonstrating professional competence, communicating with various professionals and finding the best way forward for children and adult needs. For their understanding of interprofessional team working they used phrases such as “It's quite a healthy conversation”, which means that interprofessional relationships helped them dialogue clearly with other professionals. This in turn allowed SLTs to “look at a patient holistically”, “meet the goals that are set collaboratively with all the team”, and “get a whole overview of the child's needs”. These phrases demonstrate that SLTs had a clear purpose in collaboration with other professionals of better understanding their patients’ needs using a holistic perspective. That helped their understanding of client-centred interprofessional team working. SLTs used phrases such as “just more about the child's well-being and getting their needs met”. These signify that SLTs used a client-centered approach with interprofessional working. Quotes that illustrate their understanding of interprofessional team working are:

> *Well, I suppose the purpose… the aim is to help each client, whether it's an adult or a child, to fulfil their potential and to meet the goals that are set collaboratively with all of the team.* (P21)

> *I think interprofessional working means we get a whole overview of the child's needs. So sometimes you might see a child and suspect they might have SLI and you need an EP to assess them to see what they think of their nonverbal abilities, so you need to phone them up and make a referral. So I think for me, IP is just more about the child's well-being and getting their needs met.* (P13)

One key point mentioned several times by SLTs was a positive outcome for patients and professionals. They used terms such as "you've got the patient's care at heart", "good for patient outcome," and "outcomes have been very positive". These show that SLTs see their patients as being at the heart of their practices, which reinforces the view, that the SLTs' approach to interprofessional collaboration was patient-centered. They also used terms such as "everyone gives their input" and "benefits from the interprofessional team working" for professionals. SLTs usually make decisions based on their understanding of patients, which is derived from the assessment data collected directly from them. However, when deciding on an intervention or engagement activity, they often discuss the case with others and closely coordinate with them to gain a better understanding of the patients and to design better approaches to deal with them.

> *Outcomes have been very positive, and despite the austerity in the NHS and all of the cutbacks, it's been very rewarding getting communication devices for patients that need them, getting respite when that's needed. It is very, very pressurised in the hospital.* (P9)

In general, this subtheme shows that interprofessional team working is patient-centred and the best way of sharing patient information. It also has positive effects on patient outcomes and provides good opportunities for professionals to share their knowledge and skills with the interprofessional team. The next subtheme will focus on what makes teams work well.

7.3.2 What makes teams work well

Most participants directly and indirectly mentioned what works best for their teams. Of 21 participants, 14 stated that team dynamics such as knowing each other's roles and boundaries were necessary, and seven others said that preparations for meetings and communication between professionals was essential for an interprofessional team.

> *I think it's quite dangerous to go into a meeting and have an opinion on everything. I think knowing who you are, what your boundaries are, and what you can contribute is important.* (P12)

> *Being able to talk about what is my role, and it's building that relationship of them knowing what you can do and what you can offer, and what they can do and what they can offer. That's the most important thing, being aware of each other's roles.* (P17)

For some SLTs, one of the only interprofessional working places is the MDT meeting or other interprofessional meetings. These meetings are quite important for them, which is why some of them said that preparing for these meetings affects teamworking.

> *Maybe it's not obvious, but so, sometimes meetings are only place to see other professionals.* (P24)

Some SLTs also thought that explaining their roles to other professionals in an interprofessional environment is "like are banging your head against a brick wall". This response demonstrates that lack of understanding and knowledge of other professionals about SLTs' work made communication more difficult. While consultants think they know best about a patient, it is challenging for a speech therapist to provide input and guidance, since they are not accepted, and practitioners are expected to work according to the guidelines provided by consultants.

> *To me, it's a vocation, and the best is possible while giving our care. So, sometimes, us working together, or being aware of other professional targets can help a patient use those skills more generically.* (P18)

Awareness of every specialist involved was regarded as essential. Most participants mentioned having a good working relationship with team members. Working in a team usually tends to involve conflicts and differences of opinion, and several ways in which those differences of opinion were resolved were identified.

> *It comes down to having a good working relationship between your teams, so in my schools, I like to think that they've worked with me before. There's a lot of giving and take, so sometimes I might offer some training a bit wider to the school, or I might talk to them about different things we can do, other things we can offer and equally the more familiar they are with me, the more useful, I guess, that they find my support, the more likely they're to be able to say to me, "Can we ask you about this first, can we talk to you about this child? We're doing this, how would you like to be involved?" (P2)*

The responses suggest that teamwork is appreciated in some schools, and teachers often come up with questions about the children. However, some teaching assistants and teachers do not give enough time to advise them or holding meetings about pupils.

> *I think we definitely do get better outcomes when there is better joined-up working. Because in some of my schools where there's a less of a good relationship, we can get program after program and nothing changes. But I think when there's the better relationship, we can really explain to teachers why they need to be carrying out the work and why it's important. And also explain it to parents. I think we get better outcomes then, because people understand more why they're doing their clinical semantics program. They understand more the theory behind it and why they're doing it, rather than it's just putting pictures on.* (P11)

To summarise, Subtheme Two focuses on improving the quality of teamwork. SLTs mentioned that knowing each other's roles and boundaries, preparing for meetings, communicating well with other professionals, explaining their roles and resolving differences within teams can improve teamwork. The following section will focus on Subtheme Three: Leadership and hierarchy.

7.3.3. Leadership and hierarchy

Leadership seemed to be the key component for effective professional practice. Of 21 participants, 13 mentioned that leadership varied according to where the SLTs worked, in settings such as schools; social care institutions and hospitals, where they had a variety of leaders in their different teams. SLTs stated that in hospital, some of the professionals are "quite hierarchical" and the others are "equals". Some of them "really value our opinion" and the others' attitudes depended on particular roles with regard to their clients.

> *At the end of the day, there are perhaps some members who are quite hierarchical, and if they did have the specialist title, they might take them a bit more seriously. But those kinds of people are few and far between and tend to be people that have been in post a very, very long time.* (P3)

> *It depends on my particular role for the client. So for some clients, I'm the lead professional, in which case my role is around care coordination as well as my professional input. In others, I'm part of the team so I do my professional bit, but I'm not the care coordinator.* (P2)

Most SLTs observed that they all worked at the same level, using expressions such as "I think it comes naturally" and "I feel it is quite equal", but they all had different roles in the various teams, which determined their hierarchical places and leadership issues. SLTs mentioned that in education settings, SENCOs would be take the lead in health care settings and doctors in mental health ones, and physiatrists – and sometimes adult nurses – would be team leaders.

> *So, we have set MDT forms that have a section for each profession, and we each provide some information on that patient, and it gets documented, and it gets discussed, and it gets raised. So, I feel it is quite equal.* (P3)

> *Well, if I can use the case of where there was a bit of a disagreement with that parent, the meeting was led by a SENCO, and she was the main person that kind of deal with that conflict in that meeting. However, all the other members did*

put a bit of input in to give our opinion of that child, but it was mainly the SENCO that dealt with that. And again, that was because she was a central person that knew all these other people. (P8)

a) Skills needed to be a good leader

The scenario regarding the definition of leadership and coordination was a little complex to SLTs, considering the various issues involved in serving clients with speech and language difficulties. The client groups determined the leadership structure in interprofessional working for SLTs, or the needs of clients shape up the team, and leadership issues.

Some SLTs mentioned that their line managers provided them with leadership. This was their mono-professional line manager. They used terms such as "in my SLT team, I have my formal manager". In a hierarchical system the management is at the highest level, and they provide leadership and clinical supervision in mono professional environments.

So, I think it's important to get that support from your line manager who leads on it. Who can lead or support you with that to make sure that when you're in a school, it is truly interprofessional and not just somebody telling you, "Okay, we're going to do it this way?" (P20)

...I know higher band SLTs are very experienced and will offer me guidance and advice. And then in my SLT team, I have my formal manager, but I'd actually be much more likely to go for clinical supervision to somebody else. (P21)

In medical settings consultants make the ultimate decisions and take responsibility for those decisions.

It would be the consultant. Yes, they have an ultimate say in a patient's care, and if anything really were to happen, it would be their heads [chuckles] that were on the line. I think that means that they have an overriding say. (P9)

It's the consultants, because in the end they're the ones that make the decisions. They are the ones responsible for it. We might suggest something, but they don't have to listen to it necessarily. 99% of the time they will listen to it. So, I guess it's the consultants, I'd say. (P12)

The key role of an SLT is to provide support to teachers by giving them guidance on understanding the perspectives and capabilities of patients and students using assessment results to help them find the right method of intervention.

I think it depends on who the professional is. If it's someone in school, I think it's okay, because you know that person and you feel like in school, you feel like most of the time you're on the same level as them. Whereas as if you talk to some doctors, I think sometimes you can feel a bit – I don't know what the word is. Not intimidated, but you feel a bit more kind of cautious of what you're saying. So I think it depends on who it is. (P19)

SLTs said that the main role of a leader is to coordinate between various professionals. As mentioned earlier, one participant's detailed response described an SLT's typical day. It began with a discussion between several practitioners and was followed by individual sessions.

There's a clear leader at xxxxx. No, no, no, I think I'm going to take that back. There are two clear leaders at xxxxx – one for education and one for social and personal care –, which can be tricky. In terms of community there is no clear leader nor – I mean, in practice the psychiatrist is the leader. But what we do is at the team meetings – remember what I was saying about *the locality team meetings – in reality, the chair for that rotates. So, it's not like we have a manager that's at the locality team. Well, we do, but she doesn't come to the meetings anyway.* (P16)

It's usually people acting on their initiative. And identifying something that needs to either be problem solved or improved or if a need is identified. And that person by identifying that need assumes leadership of that conversation. (P13)

As a whole, the SLT experience in leadership and hierarchy seems to vary, and to be determined by the principles and dictates of the working contexts in which they find themselves. The responses of SLTs to their roles reveal certain themes or specific responsibilities they undertake as SLTs.

To sum up, in Subtheme Three, SLTs mentioned that leadership and hierarchy issues affected their interprofessional teamwork. SLTs have different leadership models at various times of the week in various places. They mentioned that leadership was matched with client's needs, work settings and environments, organisational factor structures and mono-professional practice. According to SLTs, leadership is quite different in education and health care settings. In social care, leadership depends on clients' needs and the professionals treating them. The next section will focus on Subtheme Four: Decision-making

7.3.4. Decision-making

Of 21 participants, 12 thought that interprofessional working has a great effect on decision-making on interprofessional team relationships. The complexity of the working environment and working with a range of professionals had some effect on interprofessional decision-making. Several approaches were used to arrive at decisions; working in different settings, clients with a variety of needs and a diverse set of professionals could all affect the decision-making of interprofessional teams. Interprofessional coordination occurred mostly between specialists and other practitioners, such as between SLI specialists and psychologists, and between ASD specialists and paediatrician.

> *Sometimes you might get a SENCO saying, 'This parent is really pushing me, and can we see this child instead?' And you might agree or disagree on that, but you make sure you make that decision jointly. So they might come with a suggestion for you, but you would discuss why you agree with it or why you don't agree really, and then make a decision from there jointly.* (P18)

Certain decisions lay with the funders and their decision is final. So if it's an NHS funder or if it's social care and they make a decision, then, generally speaking, people had to go along with that. (P14)

Some participants spoke about the best interest and decision-making of the patients. They suggested that patients should be at the centre of decision-making.

Well, from our point of view it's usually the best interest decision. So it comes down to what the big decisions [are] *that we have to make for people, it comes down to what's in that person's best interest. Therefore we have also to say what we think. And I think if you go with what the majority – in the end, if everyone disagrees. But that's never really – I've never had that – I've had everyone tending to agree on a decision.* (P19)

Some SLTs responded that decisions were made by assessments, using expressions such as "decisions made by assessment" and "patient assessment to arrive at a decision". Most thought that assessments for the purpose of making decisions would be conducted by interprofessionals.

So, decisions made by assessment are usually the easier decisions made, because they're based on the child's assessment results. And so they're quite factual, and it's quite evident what the child needs, and how best to help that child with that. (P8)

*The first approach was to use patient assessment to arrive at a decision. Such a decision is straightforward because there is evidence of patient needs and best interests. In some cases, decisions depended on the patients, the working place and the funders. (*P17)

According to the participants, decision-making is not always easy in an interprofessional team. Some barriers to interprofessional decision-making were mentioned by SLTs.

I think to work as a team, a lot of the time it did work out well, but sometimes getting everybody's opinions together and coming to an agreement with about six or seven people at the table is quite hard without offending like one person. (P14)

So, it came down to what big decisions had to be made for people. Therefore, the SLTs had also to say what they thought. Some decisions that needed to be made were probably more managerial service-type decisions rather than the individual client-based ones. These decisions were usually made by the clinical lead. (P18)

There are formal structures in the community, so at one level it's decided in a locality team meeting. Yes, we will pick up this case, and yes, it will go on to the SLT waiting for next door, or it will be picked up by OT, so at that level. But an overall care approach for patients, if that's what you're getting at, is not really decided collectively. (P16)

Another barrier to interprofessional decision-making was evident where clinicians made decisions without considering the input of SLTs. For example, in a hospital, the doctor made some environment-based decisions.

Their opinions and trying to sort of iron that out. But I think there's definitely an air of the medics have the final decision. We can give our opinion, but it's not necessarily considered. (P10)

'We're discharging that patient now,' and then the doctor might say, 'well, hang on. Not happy for that patient to be discharged. Can you come back and review tomorrow?' ...I'm sorry but unless that patient really deteriorates there will be other priorities who I feel are a higher priority than your patient and then I think they understand, it's a question of time, resources, money. In an ideal world, yes, I would do that, but difficult decisions must be made sometimes, and we have to priorities. (P25)

Practitioners must have the right skills to be able to interact with professionals through a better understanding of how other specialists work. Although the current responses are unable to address the needs of communication skills within practitioners, looking back at the literature review can still add to the body of knowledge. According to the literature, collaborative working may be required to achieve the right skill set.

> *A related challenge was that medics had the final decision and the input of SLTs was not considered.* (P12)

> *Sometimes when the communication isn't being focused on, or the other team member might have a restriction, how much they can actually offer. And you sometimes have to renegotiate that, and maybe hold on to your objectives until something else has come up. Or, we bring the objectives back again and try to say why it's important.* (P8)

Some SLTs mentioned that differences had a significant impact on interprofessional decision-making; different perspectives and values could be a way to negotiation to achieve joint decisions.

> *I haven't really had huge differences. Usually it's kind of, 'Oh, this technique's not working. Can we go back to the drawing board and think of another way that this can work?'* (P16)

In summary, SLTs stated that decision-making had various dimensions. Interprofessional collaboration and relationships helped SLTs to have a negation and shared decision-making. Furthermore, some indicated their mono professional decision-making with terms like "decisions made by assessment are usually the easier decision" and "to use patient assessment to arrive at a decision". The next section will focus on Subtheme Five, which pertains to the barriers to interprofessional team working.

7.3.5. Barriers to interprofessional team working

Twenty of the SLT participants made reference to some barriers in their interprofessional working, including workplace, time, language and jargon, culture, type of communication, banding systems and personalities. The first challenge was that

professionals who must work closely with SLTs were located in different places. This made it difficult for them to integrate. They referred to being"in a situation where we are not placed", and the fact that "you're much more isolated from the MDT," and that "we're quite often mobile". From these statements, some themes relating to the challenges faced by SLTs can be identified. These include integration, isolation, mobility, culture, and differences in language, personality and communication. Challenges can thus be considered as the main theme, while these become the subthemes carried out by an analysis of the data.

> *It's time, commitment to doing it and just reliability of people really. If you set up the meetings but nobody comes, then you can't do that communication, and its locality as well, so we tend to be working in the workplace, So, if you're out in the community, you're much more isolated from the MDT as opposed to working on the ward.* (P1)

> *I think things like the fact that we're quite often mobile, so we're out and about; it's sometimes hard to get a hold of people.* (P11)

> *The problem comes when you can't get in contact with certain professionals that you need to. For instance, I've been trying to get in contact with a doctor, you know, to discuss a case, which would be very helpful and very valuable. But I've just not been able to get in contact with him. So that's kind of where the breakdown comes from.* (P9)

Additionally, the fact that some medical centres are spread over a large area makes it difficult for SLTs to engage with professionals who may be located in different areas of a hospital or even outside it. This means that if a patient needs to be treated by several specialists such as psychologists, nurses and psychiatrists, coordination becomes challenging. One practitioner may have to wait for a report from the other to decide on the next course of treatment.

> *I guess being spread across quite a large site is a barrier, and not being ward-based. Most of the MDT is ward-based. That would be a physio, nursing,*

> *psychology and psychiatry. So that's a bit of barrier because I can't be on the ground or make specific order documents as they are, and so some things aren't handed over to me in time.* (P16)

SLTs feel that the fact that they were not all from the same place and did not have enough time to communicate with others did not help the situation.

> *Why because of the timing issues? Time and place, time, yeah. I think, and maybe – because you have to go to one school and you have just to have three hours and then three hours, maybe you have four – three children.* (P20)

SLTs thought that some personalities had a negative effect on interprofessional working, referring to "tricky personality issues", "those kinds of people" and "those are individual personalities". These terms highlight the various subthemes concerning the challenges faced by practitioners, which also include personality differences. The differences in the personalities of those who interact can cause conflicts, which can then affect the efficiency of the health care service.

> *There are some tricky personality issues. In the NHS, nobody is ever nasty to anybody else, but you start to understand what the tone of an email means, it's all very masked. There's a lot of passive aggression that goes around. And a lot of getting things done is around relationships. It's all about relationships.* (P8)

Overall, according to SLTs, barriers to interprofessional team working consist of work settings, organizational and system factors, personalities and the complex nature of their work. The following section will focus on the summary of Main Theme 1 – interprofessional team working.

7.4. Summary of the theme

Overall, SLTs said that they were required to work with a range of professionals in various places. This section concerns the experiences of the SLTs in the context of interprofessional team working. How that environment could affect their decision-making process. More generally, the SLTs had a positive perspective on working in interprofessional environments. However, working with the other professionals was not

easy, as some difficulties and human factors had to be taken into consideration. These summaries of the respondents' comments and the themes they raise seem to indicate that SLTs are a key part of the whole process of professional team working and collaboration. Communication is another major sub-theme of the findings. The following section will focus on interprofessional communication.

7.5 Main Theme two: Interprofessional communication

As human communication scientists, the SLTs saw communication as the main focus in their interviews. All participants, directly and indirectly, mentioned that communication was an essential part of interprofessional working and for their professional lives. In this section, the theme of interprofessional communication is explored with the identification of the sub-themes communication types and communication skills. While "communication type" refers to the mode of communication used, "communication skills" denotes the communicator's ability to address the need for communication and effectively communicate the intended message to another person or group.

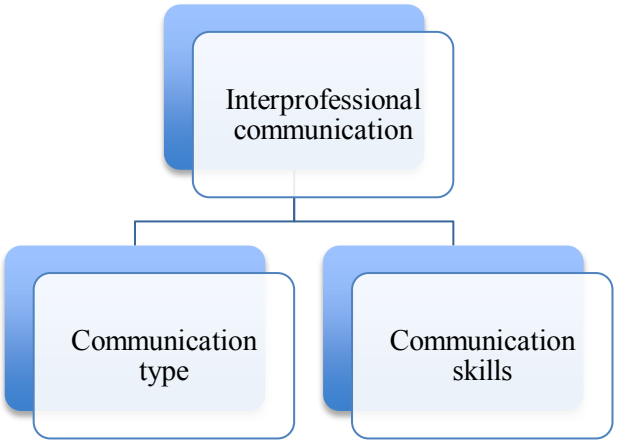


Figure 7.3: Main Theme Two: Interprofessional communication

7.5.1 Communication types

The SLTs recognised four ways in which team members communicated with each other: face-to-face, email, phone and meetings. 19 participants mentioned that face-to-face communication was their preferred way of communicating because of the difficulties associated with emails, phones or texts with regard to explaining a point.

Each practitioner had different preferences of communication type. Most practitioners preferred face-to-face communication with their patients.

> *I prefer to face-to-face. I think it's very difficult to fully explain your point of view over email or by text or telephone.* (P23)

> *I personally prefer face-to-face, just having that discussion.* (P19)

> *So, a variety. If I'm ever demonstrating or modelling, I prefer face-to-face. If I'm ever recommending anything – providing a new recommendation – I would have face-to-face, because then I can physically demonstrate what I mean. I'm a very visual learner, so most things I do are quite visual. And with all of the other kind of admin side of things, I think e-mails are quite good.* (P10)

Another advantage of face-to-face communication is that it allows people to stress the urgency of a situation. Moreover, in an email or call, it is not always possible to fully understand the patient or the needs of the communicator, whereas face-to-face meetings have the advantage of understanding the opinions and personal needs of the communicator. This is why face-to-face communication is the most preferred communication type in health care.

> *Face-to-face. Definitely, face-to-face. Yes. Because I think emails can be very – without meaning to, you can be quite insulting in an email. And if you're saying, "You must be this", or, "It's our opinion that this person needs such and such". It comes across as a bit harsh, whereas if you talk to somebody face to face, you can get an understanding of how busy things are…* (P1)

Almost all the participants had to make reports of their email, text, telephone and meeting exchanges. Email and phone exchanges can be easily forgotten, and thus they need timely remainders. The results of phone conversations are thus usually files, kept as case files for records, so that if the communication is forgotten, the document serves as a reference or even as court evidence in critical cases.

> *I think email, because if you talk over the phone, it's easy to forget what you said. Whereas email is black and white, so if somebody's forgotten something*

you can easily remind them. Or if there's a tribunal or something that comes up, it's all evidenced what's been said, what's been planned. So, I think sometimes its better. Phone calls are nice because they're personal, but especially with the more complicated cases it's nice to have things on email because you can put them in client's files if you need to, you can take them to court if you need to just as evidence to back yourself up. So, email is better. (P3)

I send reports to GPs, dieticians, physios, OTs and other speech therapists as well. I liaise with the hub based in xxxx that does all of the assisted communication devices like the Toby Light writers and Mega Bs and those kinds of electronic things. I liaise with the teachers. I go in, and I help one-to-one with the SENCO and letters home to the parents as well. (P10)

I telephone them. I telephone the kitchen. But then a lot of it is done via email because I'm spread across a site, and so are they, so it's quite tricky sometimes, to me. (P 13)

Meetings were another way of communicating mentioned by participants. Multidisciplinary meetings were found to be the regular mode for health care practitioners.

Well, most multidisciplinary meetings are usually every second week of the month. I don't think they've got specific dates. But usually, we get emails as well, inviting us to a particular meeting. (P25)

In different teams and settings, there could be differences in communication types as well. For instance, in any given week there could be regular meetings between practitioners without the need for patient involvement. However, the following week might see the communication type's change and patients become involved in the meetings. Complex issues concerning a single patient might be discussed in one meeting, while multiple meetings to discuss the needs of several patients might also be required. Relevant professionals communicated in different ways according to what was best suited for the given situation and the demands of the working environment. When a

problem occurred, it was usually followed by a meeting in which discussions were conducted by post and where several reports were prepared by the meeting's attendees and shared for the purpose of understanding others' perspectives and obtaining a comprehensive view of the situation. Reports may differ, but all use standard formats.

> *Every three months we tend to have a core team meeting about an individual. If there's nothing much happening, that core team meeting may not take place. But if there's a problem with somebody and we don't think they're making any progress, then typically there's a core team meeting before we write the report. And then everybody writes the report. We all get a chance to see each other's reports, and then there's a formal review with the funders. And the funders, these are NHS or social care. So, there's another formal meeting, and we then go through using their format. We then review each resident in turn. And that it's [?], you can see the format we use because it's standardised.* (P23)

According to Subtheme Two, most participants preferred face-to-face communication, but some used email, phone calls and reports. The following section will discuss communication skills in the context of IPCP.

7.5.2. Communication skills

Several skills were identified as being necessary for each team member for successful team communication. 20 participants suggested that the communication skills needed for IPCP include understanding others, flexibility, adaptability, friendliness, willingness to share information, actively advocating for the interests of patients, and good listening skills. Flexibility and adapting to others' ways of working were assumed to be significant within a team. These can work in conjunction, so that good communication is achieved using a combination of these skills.

> *So, understanding each other's roles. Good communication. Understanding other viewpoints. Being flexible and so being able to adapt to someone else's way of working, so that's officially important for that school and teachers, because schools have their ways of working.* (P2)

The respondents highlighted the value of skills such as teamwork and communication as significant for effective professional cooperation and delivery. There were also some stereotypical expectations about being young or old and its effects on interprofessional interactions.

> *Well, I think you have to go in with an open mind. I think it's quite important because I'm – as a man and particularly because of my age, people will defer to me if I say too much, I think. So, I quite often think [?] would just to go with an open mind or wait until other people have put their view in. Otherwise, you end up with an unnecessary – or too much credence is given to one person's view, if they're particularly forthright and they have strong opinions. (21)*

> *Certainly, knowing where they're coming from, you have to have a good understanding of what they want to achieve to be able to help each other. You need to have a broader understanding of that. If you're going into a meeting you don't really know what they want out of it, you get people to help sometimes, who are just spending more time talking it [across disciplines?]. So understanding what their goals are in broad terms, I think, is important* (P14).

Some participants said that the ability to explain difficult concepts in simple terms and being open to a variety of ideas and communication was significant. It is important for a person's communication to be flexible enough to allow acceptance of conflicting views.

> *There needs to be a team player, so if you work as a team you take on another profession's perspective and approach to something and stay open-minded.* (P3)

> *I think you need to be respectful, patient. Patience is a big thing. Open, honest, and I think being friendly is really important. Because, people are not going to want to come and talk to you if you're not friendly. That's how I feel anyway.* (P18)

Other participants mentioned that listening, respect, equality, patience and honesty were essential for a team. When all these factors are present in a person's approach to communication, the best results can be achieved, since no individual would be given

greater prominence than any other. At the same time it is essential that a few do not dominate the discussion and that everyone has the chance to speak.

> *I think the best teams work well when everybody listens to each other and respects each other, and everybody is given equal importance. You know, nobody is more important than anybody else.* (P1)

> *I think you need to be quite a friendly person. You need to be willing to share information or be good at listening. It's all right you being able to talk and give information, but you need to hear that back. You need to be able to kind of come to a compromise in a negotiation as well.* (P12)

Overall, SLTs mentioned that the skills important for good communication in an interprofessional team are listening, being open, respect, honesty, friendliness, equality, flexibility, adaptability, willingness to share information, and advocating catering for the interests of patients. The following section will focus on Main Theme Three: how it feels to be an SLT.

7.6. Main Theme Three: How it feels to be an SLT

15 of 21 participants had experience of professional identity. This was discussed in the form of their feelings about being an SLT. Main Theme Three focuses on the two subthemes of not being understood and what it is like to be an SLT, and includes identifying the SLT's role, other professionals perceived as not having knowledge of SLT, confidence, professional knowledge, the banding system, and understanding each other's roles. The theme deals with the feelings of SLT practitioners about their work and themselves. Subtheme Two concerns the lack of understanding on the part of other professionals and what it is like to be an SLT practitioner. The subtheme of not being understood relates to the feeling of being side lined in hospitals and educational institutions. The subtheme regarding what it is to be like an SLT deals with the communication-taking place between SLTs and other professionals as well as the value others impart to their profession. These two themes are explored in the subsequent sections.

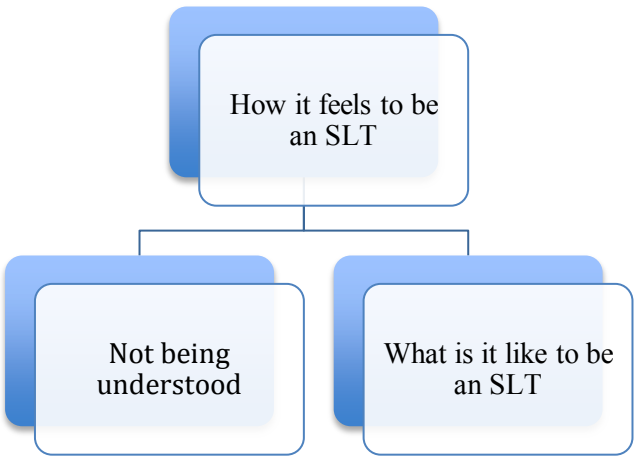


Figure 7.2: Main Theme Three: How it feels to be an SLT

7.6.1. Not being understood

10 of 21 participants thought that other professionals did not understand the SLT's role in their teams. There was a feeling of being forgotten and of a lack of knowledge on the part of other professionals regarding them. They used phrases including "constantly been forgotten about" and "they don't understand our role".

> *We've constantly been forgotten about. Nobody invites us to meetings that we should be going to. And I don't think quite a lot of the professionals that we work with really understand that job role that often. So that's a constant battle, to have to explain why we're there, what we're doing, and that we don't just teach people to talk nicely….* (P1)

> *I think it's changing but I think a lot of particularly newly qualified professionals, they don't understand our role. Again, they think that we are there to assess communication only; we do all the kinds of elocution exercises. They don't understand that communication can also affect their role. So if they're asking the patient to mobilize, that patient may not have the understanding.* (P14)

The respondents stated that the different dispositions of SLTs are based on their confidence levels and experience, especially in decision-making, as well as contributions in professional collaboration and communication. They used terms like "The main thing is confidence" and "confidence in what you're doing". The responses reveal a lack of understanding of the role of SLT practitioners among new professionals joining hospitals and care facilities.

> *The main thing is confidence. When you're newly qualified, confidence plays a big part because sometimes you have a lot to say, but you do not feel confident to say it, especially when you have expert people who have been working for many years and you have a new suggestion.* (P1)

> *Confidence in what you're doing and you as a person and your ability to voice your opinions, be it right or wrong. SLTs also think to speak to other professionals, like other therapists who went to university pretty much some years ago said they did not have interprofessional working in their modules; they think you can see the difference, in that they wanted to work more closely with other professionals.* (P2)

The main theme discussed in this section is the lack of understanding among professionals regarding the role of SLT practitioners who serve patients. This could be attributed to a lack of understanding of new practitioners about the role of SLT. They may not appreciate how other professionals' work, and may find it difficult to understand the needs of the patients they have to take care of.

7.6.2 what it is like to be an SLT

These themes describe how the participants see other people's views on SLTs. Eight of 21 SLTs thought that the other professionals' perspectives of their work were an important factor for effective communication and interprofessional working. It was observed that there are members who appreciate SLTs and others who do not. The subtheme concerns the way SLTs behave and the experiences they acquire. The theme includes an understanding of the attitude of professionals towards others.

For example, one respondent stated that some consultants might not value other people's opinions and see themselves as superior, while others can be very comfortable working as a part of a team.

> *And then sometimes with the consultants and pharmacy, they tend to not value our opinion as much I think, and possibly see themselves as slightly higher.* (P9)

> *I'm very comfortable working with the teachers and teaching assistants in my team. Other professionals that I've met, I haven't really met any - so I was quite comfortable working with the educational psychologist because you both kind of came from the same perspective.* (P13)

Overall, SLTs said that their profession was not well known by other professionals, who needed to learn more about the SLTs' roles. Sometimes they feel as if they had to explain their roles to other professionals. Some participants also mentioned that confidence and professional knowledge is important in an interprofessional team meeting and for the purpose of understanding each other's roles.

The following section will focus on the main theme of IPE.

7.7. Main Theme Four: IPE

This section discusses the experience of SLTs in the context of IPE as SLT students. All participants had some experience in IPE. 19 of them had positive feelings about it; only three had negative experiences. This section will focus on IPE within the subthemes listed below. It begins with SLTs' understanding of IPE and continues with its benefits and the skills learnt from it, as well as attitudes to the role of IPE in preparation for practice.

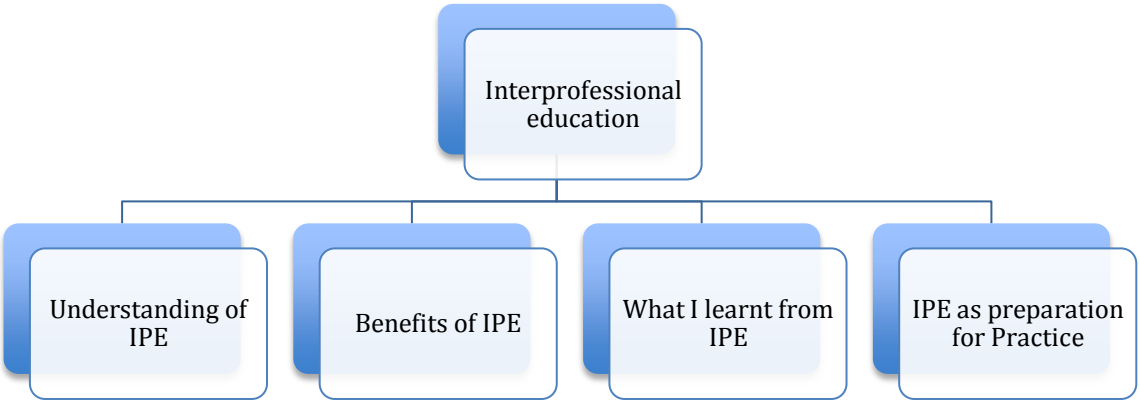


Figure 7.3: Main Theme Four: IPE

7.7.1. Understanding IPE

This subtheme will focuses on the various perceptions of what IPE meant to the participants, which involves understanding other professionals, explaining their roles to others, holistic perspectives, and appreciating various views and perspectives. The sub-theme entails the understanding of IPE, which explores students' understanding of IPE as a deep-rooted process of learning.

17 of 21 participants mentioned their understanding of IPE.

> *I think it was a nice way to understand what professionals you might come into contact with when you work as a speech and language therapist, and the kind of things that you might talk to them about, and the knowledge they might have is different from what you might have.* (P13)

Some SLTs suggested that IPE workshops at the university worked at that time but not in the present because, in reality, life is not the same as was portrayed in the workshop.

IPE gives an idea of how professionals should ideally collaborate and work together, but when it comes to actual working, the scenario may not remain the same.

> *At that time, it was more about how professionals could work together to make sure that they're thinking about the individual holistically, so as for how everyone can kind of fit in to support that individual. But now it's a bit different because I'm finding that – so I felt that IPE sessions – although they were amazing – then they weren't beneficial, it wasn't real. I don't think professionals communicate like that yet.* (P10)

> *I think it was about discussing things from different points of view, seeing other professions' point of view, and learning a bit more about the roles of all the professions. And how important it is that people work together and not stay in their own offices and jobs.* (P14)

The SLTs also felt that IPE was aimed at reducing intra-team conflict when it came to working in groups. They also thought that interprofessional environments gave them opportunities to promote their jobs. The idea behind IPE is to make professionals work together and think about each other holistically. However, communication is not that simple, as professionals may not understand the perspectives of others unless they are provided with a setting in which they interact with them for a long time.

> *In the beginning I didn't really understand it, because it seemed like common sense that you have to work as professionals, but then as the years go on you realize that there's a lot of boundaries that come in place. So, I started taking it more seriously, because you start to realise that it's crucial for the clients that you work as a team and that any small discrepancies could mean that the client doesn't get the service that they need.* (P17)

Some participants also mentioned that IPE gave them excellent opportunities to understand patient values. During their learning, it is essential for students to communicate with service users. This would help the students understand how

practitioner's work and the service users' boundaries that they should respect while providing care services.

> *I think it was really useful to get the contact with the service users to get their experiences and the fact that often communication was the big factor in services not being fully valued or breaking down and that being a big issue for patients really.* (P18)

In summary, the SLTs had an understanding of IPE and other professionals, an explanation of roles for holistic perspectives, and an awareness of various viewpoints and perspectives. The next section will focus on the subtheme of the benefits and limitations of IPE.

7.7.2 The benefits of IPE

18 of 21 respondents identified several benefits of IPE, such as the ability to develop interprofessional skills and gain fresh perspectives. It also gives them an idea of their working styles and helps them understand various professional roles during their studies and develop ties with other professionals, acquiring team skills as they do so. The interview subjects were known to have a positive impact on IPE in general, but they can be classified into several groups based on their responses. The subtheme of IPE benefits generates subthemes of working together, learning together and working with other professionals through shared modules.

> *I think speaking to other professionals, like other therapists who went to uni years and years ago and said they didn't have interprofessional working in their modules, I think you can see the difference, in that we wanted to work more closely with other professionals. They learnt that on the job as the years went on that it was important, whereas we have come into the job knowing that it's important to work with other professionals. I think it's important to have it as a module on the course that students are ready to go into the world and know that they have to work with other professionals, really.* (P3)

One prominent benefit of IPE was that it helped SLTs understand the roles of various professionals. Different practitioners have different levels of understanding and knowledge as well as different perspectives on patient care. These differences are thus understood better when working together, and a suitable communication/learning approach suits different kinds of professionals within the field.

> *...How we can work together, and just developing those skills for working within a team and realizing that people come from different backgrounds and, therefore, they look at the same patient completely differently to how you do. I think that's a really important factor because we tend to think that everyone thinks the same as us and people really don't.* (P20)

Another benefit of IPE is that it provides an opportunity to establish links that facilitate working together and developing team skills. Different approaches can be adopted in the learning events, such as classroom-based teaching in one session and direct contact with users in another. Sessions with service users or patients, as opposed to regular sessions, can also be carried out differently, as these would require practitioners to allow the patient to speak at length.

Think there was an emphasis on how important multi-disciplinary working was. (P2)

It was noted that service users had a positive involvement in the context of IPE.

> *So we had quite a lot of contact with service users. The first day that was more classroom-based just with other students, but the other events, there was a lot of contact with service users.* (P2)

> *I remember again a very, very powerful session with a mother of a child who had special needs. I think they had Down syndrome, and they had had this experience of trying to help this child stay in mainstream school, and then they had to go down the special education route. And I remember the lady talking about the strain and stress it* [caused]. *Her marriage had broken down, and really powerful stuff. For once, it wasn't a case study that we were just reading*

that anybody could have made up. It was a real life, and they were real stories behind this person. So that was very meaningful and very memorable. (P3)

Participants also stated that IPE does not work in real life, as there can be specific challenges while communicating. Thus, while dealing with real-life situations, practitioners must develop a better understanding of this challenge while taking a session.

In both situations, I think it's really important. Because this is one issue that I'm having myself because of the lack of communication between professionals who work on very similar targets. Like for example, the teacher language therapist was a good outreach in social communication. If a child's got autism, we'll all be working on the same kind of target. So, because there's no communication, sometimes it's being overlapped. And the same with private therapists versus NHS therapists. At the moment, I haven't seen that kind of link between working together rather than us and them. So I'm finding that quite difficult. But then when we were discussing it [?] in the IP section, it was quite evident that we all came from a very similar point of view. So I think the lesson was lost somewhere in between at the moment. (P9)

I don't think we did work with other students on placement. Things like that we didn't really – we didn't really work – the only time we ever really worked with other students from other courses was on those IPE days. (P22)

Overall, according to SLTs, IPE gives them an idea about their working style and an understanding of different professional roles. Creating links with other professionals, developing team skills, and the services users' involvement in IPE sessions have a great impact on the SLTs' perspectives of IPE. However, some SLTs hold the view that IPE sessions have not prepared them for real-life situations. Thus, the following section will focus on the subtheme of what the participants learned from IPE.

7.7.3 What the participants learnt from IPE

Of 21 SLTs, 18 felt they had acquired some positive learning experiences from IPE. The key elements of knowledge that they state as having learned from IPE knew how to work with different professionals, their ability to explain what they did, and their awareness of the broader framework within which they had to work in real life practice. The subtheme deals with this learning from IPE; it can be further divided into subthemes within the aspect of learning these include understanding of others, the ability to explain, understanding roles, understanding viewpoints, discovering goals, building awareness and creating opportunities. These would be learnt from an IPE session and are thus, are included within the theme of learning.

> *I think a lot of the time my most important lesson was just to understand that each professional works differently and I think you have to be really patient and also explain your role and what you do to other professionals. Because sometimes you think we all know what each other does, but there's a lot of depth to what we all do, and it's quite different in different ways. We have to explain that to each other a lot of the time.* (P2)

> *So that's quite interesting, to kind of try and let people know what* [the] *speech and language therapist's role is.* (P9)

Some participants mentioned that their learning from IPE is essentially "learning others' roles", "having knowledge of working with different professionals" and "a kind of foundation". If a practitioner does not have complete knowledge of the roles and needs of others in the discussion, it can lead to problems in communication. It is thus essential for them to have a good understanding of others before participating in the discussions. IPE can help them gain this knowledge, facilitating their work.

> *One of the main things I learnt from IPE was what the job role of different professionals is, and who I have to refer a child on to for [?]. So, for example, referring on to a paediatrician or a [?] or –, so that's one thing that I learnt from IPE. And I think as SLTs in general, we're quite good at communication, so – because the whole course is about communication, and not something that you*

learn from the beginning of the course, so it's not just from the IP section. But I think its communication in general, and can communicate with all of the people involved, including the parents, because sometimes parents get missed out from these activities, so they're really the centres of the child's care. (P20)

I work in an MDT, so having that knowledge of what different professions do and having that knowledge of working with different professionals. Obviously, it's a day-to-day thing working in a team of professionals. I think if we don't know how to work with each other we're going to really struggle. (P1)

Some participants described their experience in terms of what they had learnt from IPE with expressions such as "I think the opportunity to talk with colleagues and present case information and "work collaboratively." Here, IPE provides valuable lessons to new practitioners about how others work, which can be immensely useful for adaption to a variety of circumstances. If this understanding is lacking, new joiners can face cultural shocks, as it would become difficult for them to understand how practitioners work in real-life scenarios, which can be different from what they would have experienced as medical or health care students.

Yeah, I think now, I probably use – more initially what comes to mind is previous work experience. But when I started working, I think it was beneficial that it made the whole course, not just that specific one event. But when you're taught about other needs, there's always an emphasis on other professionals that you work with, and we had lots of personal and professional development lectures and seminars about multi-disciplinary working. And I think that's a good start for your first job because if you were not prepared-- it's a shock anyway. (P1)

I think the opportunity to talk with colleagues and present case information and work collaboratively with my team colleagues has stood me in very good stead for when I had to go into case discussion and multidisciplinary team meetings. So, yes I mean I'd say every – well, every week. Every week I put into practice the skills that I learned in IP, very, very useful. (P25)

They also mentioned that the most important learning thing they learned was working with other professionals and building their awareness of working with families and patients and their values, in such terms as “my most important lesson was just to understand that each professional works differently” and “I just think it has made me much more aware of how patients and families should be treated”. When learning sessions are conducted, people participate in discussion by speaking about themselves as well as listening to others, so that both can be understood.

> *I wouldn't be able to pick out concrete answers to that. I just think it has made me much more aware of how patients and families should be treated. And it almost annoys me when doctors or other people talk over patients as if they're not there. So I think my biggest learning thing is really how am I going to impact on a family member or a patient and what am I going to do to make sure that it is as a positive experience as it can be for them as well as including them within their treatment and care.* (P23)

Some SLTs also suggested that during their time at university they “didn't appreciate” IPE, However, when they began working, they saw its importance.

> *I think at the time; I perhaps didn't appreciate it as much because I had assignments and everything else to be doing. But on reflection, I think it prepared me very well. And in comparison to some colleagues who graduated from other universities, I feel more confident attending those meetings practising as an autonomous SLT, whereas they needed a bit more coaching when they were to be qualified therapists.* (P20)

In summary, SLTs said that they learnt various skills and built their knowledge from IPE. They had gained knowledge of working with various professionals and families, had become aware of working with patients and professionals, had acquired team-working skills, become familiar with each other’s’ roles, explained their own and developed a holistic view. However, some SLTs maintained that their learning from IPE was not relevant in real life situations. The following section will focus on attitudes to the role of IPE in preparation for practice.

7.7.4 IPE as preparation for practice

The respondents said that IPE helped them in IPCP. They expressed a range of attitudes towards IPE. Of 21 participants, 15 felt that IPE prepared them by giving them knowledge, raised their awareness and exposed them to a variety of professional viewpoints. They enjoyed the IPE component.

The first attitude towards IPE was that it prepared them and equipped them with knowledge. When learners were asked to present their views on how these sessions helped them at work, they suggested that they could better learn to work together by developing an increased understanding of others' viewpoints and several other practical matters. However, some of the students felt reluctant to share their knowledge and perspectives, fearing that others would become aware of their ignorance.

> *I think that it prepared us quite a lot. It is about working together as professionals, and I think it has increased awareness of what different professionals do and what the goals of different professionals are, and different points of view as well. Because, for example in our discussion, just hearing other points of view, your mind fills up with a lot of different things. I don't know how well I am practising. Just because of the opportunities that I have to relate with other professionals, because I don't have that direct access at the moment. But I think it was useful.* (P8)

The other attitude mentioned by SLTs was awareness.

> *I think, to me, what the role and the most important thing is, is that it makes you aware of it.* (P24)

Some participants also mentioned limitations.

> *To be honest, not a lot. It was interesting to meet other professionals and their specialities, but I think it's something you could learn in a lecture theatre as well.* (P15)

Some of the IPE events at DMU and the University of Leicester entailed services user involvements. The attitudes of SLT students to meeting with service users during the IPE workshops were positive, and the SLTs found them useful. An analysis of the interviews revealed the feelings of respondents toward meeting with service users during IPE. Learners' views regarding their experiences of IPE events were considered. It was found that most of them liked attending the events and found them to be very useful for practical learning, since these events did not merely give those direct lessons through workshops, but also allowed them to meet patients and health care service users.

> *I thought it was really, really useful. In the first year, on the listening workshop, we met with several service users.* (P21)

In general, most SLTS had positive feelings about IPE courses at DMU. Only a few of them had the negative emotions mentioned here. The final section will summarise the research findings.

7.8 Summary of findings

Four major themes emerge from the interview data for the 21 SLTs working in the diverse sectors involved in this research. IPE themes entail five subthemes: understanding of interprofessional team functioning, a holistic awareness of what makes them function, leadership, hierarchy, decision-making, and barriers to interprofessional team working. The second major theme (interprofessional communication) is divided into two subthemes: communication types and communication skills. The third main theme pertained to what it is like to be an SLT and the factors affecting them, including "not being understood by others". The fourth main theme is IPE, which comprises four subthemes: understanding IPE, its limitations and benefits, the skills it confers and attitudes to it. Most participants prefer face-to-face communication, whereas others use email, phone calls and reports. 19 respondents suggested that it was important to develop communication skills for IPCP such as adaptability, understanding others, being flexible/friendly, the willingness to serve patients and good listening skills. SLTs acknowledged that good preparation, understanding each other's roles and the ability to resolve conflicts was the key for a team to work effectively, and that leaders must proactively coordinate activities between all professionals and understand their roles as well as responsibilities to ensure the best outcomes for patients. Their experiences were influenced by the principles of their specific working contexts, which were predicated on client requirements and working culture.

7.9 Summary of the chapter

The chapter has focused on the findings derived from the participant interviews. The fact that SLTs' workplaces and other situations are the prime focus of this subject means that a fair idea was obtained regarding the roles of recently graduate SLT professionals. The themes were constructed in a way that demonstrates the trends and the current state of the SLT environment, particularly in the context of their experiences in the UK. All the interviews were decoded and analysed to find the five emerging themes or trends. These themes provide a deeper insight into the SLTs interprofessional collaboration and education experience, roles and understandings. It also allows exploration of their perspectives and perceptions regarding IPE and IPCP.

CHAPTER 8: DISCUSSION

This study explores the discipline of SLT in the context of IPE and IPCP. The literature review has clearly highlighted both the positive elements and the barriers regarding systemic, organisational and interpersonal levels within IPCP (D'Amour and Oandasan, 2005), albeit focusing specifically on nursing and medical teams operating in acute settings. On the other hand, there is only limited research on IPE outcomes. These two factors underlie the significance of this study and the benefit of its findings to the existing body of research. Throughout this study the researcher has sought to focus on the theoretical and practical importance of IPE and IPCP to SLT.

This chapter consists of four sections. The first focuses on the research objectives and the corresponding research questions to be addressed. This has been subdivided into examinations of each individual research question. The research questions and responses are structured so as to substantiate the association between the literature review and the study's findings, and to highlight the relevance of these findings to SLT. The summary of the learning experience emphasises that the findings can benefit SLT policymakers, researchers and other relevant parties. A discussion of how the objectives were met and how the research questions were answered follows. The second section concerns the present research's funding and how this can be used in everyday life. The research then applies an adapted model of IPE and IPCP to SLT practice.

8.1 Meeting the objectives and addressing the research questions

The objective of exploring the SLTs' experience in IPCP and IPE was successfully achieved through the collection of appropriate and relevant data in semi-structured interviews that addressed the research topic. The findings of the data analysis and the conclusions drawn reflect the outcome of this investigation. The objective was met using qualitative research methodology. The participant's responses to the questions posed can be explained by focusing on adult learning, reflective learning and IPL theories. This approach also enabled an exploration of the various roles assumed by SLTs in various interprofessional contexts, while revealing much about their experience

of teamwork and their attitudes towards both teamwork and education. This also provides the material to meet additional objectives. Research on participant perspectives and knowledge of pre-registration preparation were explored in the interviews by asking questions about their pre-registration courses and learning styles, as well as their attitudes towards teamwork. The TA of the responses collected during interview and their subsequent interpretation focused on pre-registration courses and attitudes towards teamwork in order to achieve objectives. SLTs who participated in the interviews worked in schools, hospitals, mental health units and patients' homes. The study found that they sometimes worked in three very different work environments in the same week. SLTs commented that at times they did not feel they could be themselves when they were a part of a team, especially when working with such a variety of teams. Overall, the research objectives were successfully achieved. The following section will address the research questions.

Research Questions

1. What are the experiences, roles and knowledge of recently qualified SLTs regarding Interprofessional Collaborative Practice (IPCP)?

2. What are the outcomes of Interprofessional Education (IPE) for the current practice of SLTs as regards IPCP?

According to the present findings, the research questions have been successfully answered. This will be comprehensively discussed in the sections regarding the experience of SLTs in interprofessional working and IPE. The responses to the research questions assess and review the association between the literature review and the findings, along with the latter's subsequent impact on the existing body of knowledge through the data on the experience of SLTs in IPE and IPCP on which it draws. The following section discusses the summary of the themes and research findings.

8.2 Summary of themes and the connections between them

This section summarizes key findings before focusing on how these findings relate to each other. The first main theme is that of interprofessional team work, which discusses how teams work, what works well and what does not. It also discusses a holistic awareness, leadership and hierarchy, decision-making, and the barriers to interprofessional teamwork. The second major theme relates to interprofessional communication, and discusses the communication methods used by interprofessional teams and how they communicate with each other in practice. The third main theme relates to how it feels to be an SLT, and an SLT's function and the factors affecting this, including the SLT's professional identity not being adequately understood by others. The fourth main theme is that of IPE, and discusses SLTs' experience of IPE and the impact this has, including their understanding of the limitations and benefits of IPE, the skills required for IPE and the attitudes towards IPE when preparing for practice. The focus will be on the connections between them, as each theme and subtheme has some relationship to all the others. As a human communication scientist, the present researcher has realized that SLTs have very specific professional perspectives on IPE and IPCP. The role of communication has been highlighted as one of the essential elements of an interprofessional relationship.

It has been reported that the existing literature, especially Suter et al. (2009), states that communication skills and roles should be taught at undergraduate and postgraduate levels. It has overlooked the discussion of communication theories, including the role of communicative elements and their effects on interprofessional collaboration. It would be most interesting to learn about other health care professionals' perspectives on IPCP.

Despite this apparent absence of attention, subjects related to communication have emerged as one of the most important connecting themes in this study. The literature, particularly Foronda et al. (2016), points out that training programs with standardized tools and simulations are effective in improving communication skills. It emphasizes the importance of interprofessional relationships and communication. This study has presented the views of communication specialists on IPCP and IPE. The theme of communication has been directly and indirectly connected with other themes such as

interprofessional team working, where communication is key when building relationships between professionals and working as a team on a daily basis. Interprofessional team working takes the form of managing discussions and disagreements within teams, decision-making and team leadership. Collectively, these studies highlight the importance of communication as a theme and as a link between various themes. According to O'Daniel and Rosenstein (2008), communication helps health care professionals work collaboratively, share responsibilities for decision-making and prepare care plans for patients. However, a lack of communication and interaction has caused medical errors and unsafe practices. Communication types and skills are also used in interprofessional team settings, and IPE has been observed to play a key role in resolving conflicts between different professionals, thereby improving patient outcomes. O'Daniel and Rosenstein (2008:3) specifically state that

> *Effective communication amongst staff encourages effective teamwork and promotes continuity and clarity within the patient care team. At its best, good communication encourages collaboration, fosters teamwork, and helps prevent errors*.

Several times, SLT interviewees highlighted the possession of relevant communication skills and knowledge as critical for interprofessional relationships and teamwork. Meanwhile, subthemes such as leadership and decision-making overlapping with communication types and skills have emerged as the main priorities. For example, SLTs mentioned conflicts in their teams, hierarchy and leadership issues, all of which directly and indirectly relate to an absence of communication and conflict resolution skills. O'Daniel and Rosenstein (2008:5) point out that

> *In health care environments characterized by a hierarchical culture, physicians are at the top of that hierarchy. Consequently, they may feel that the environment is collaborative and that communication is open while nurses and other direct care staff perceive communication problems. Hierarchical differences can come into play and diminish the collaborative interactions necessary to ensure that the proper treatments are delivered appropriately.*

This clearly supports the existence of a relationship between communication, leadership and hierarchy, and highlights the effects of these elements on practice.

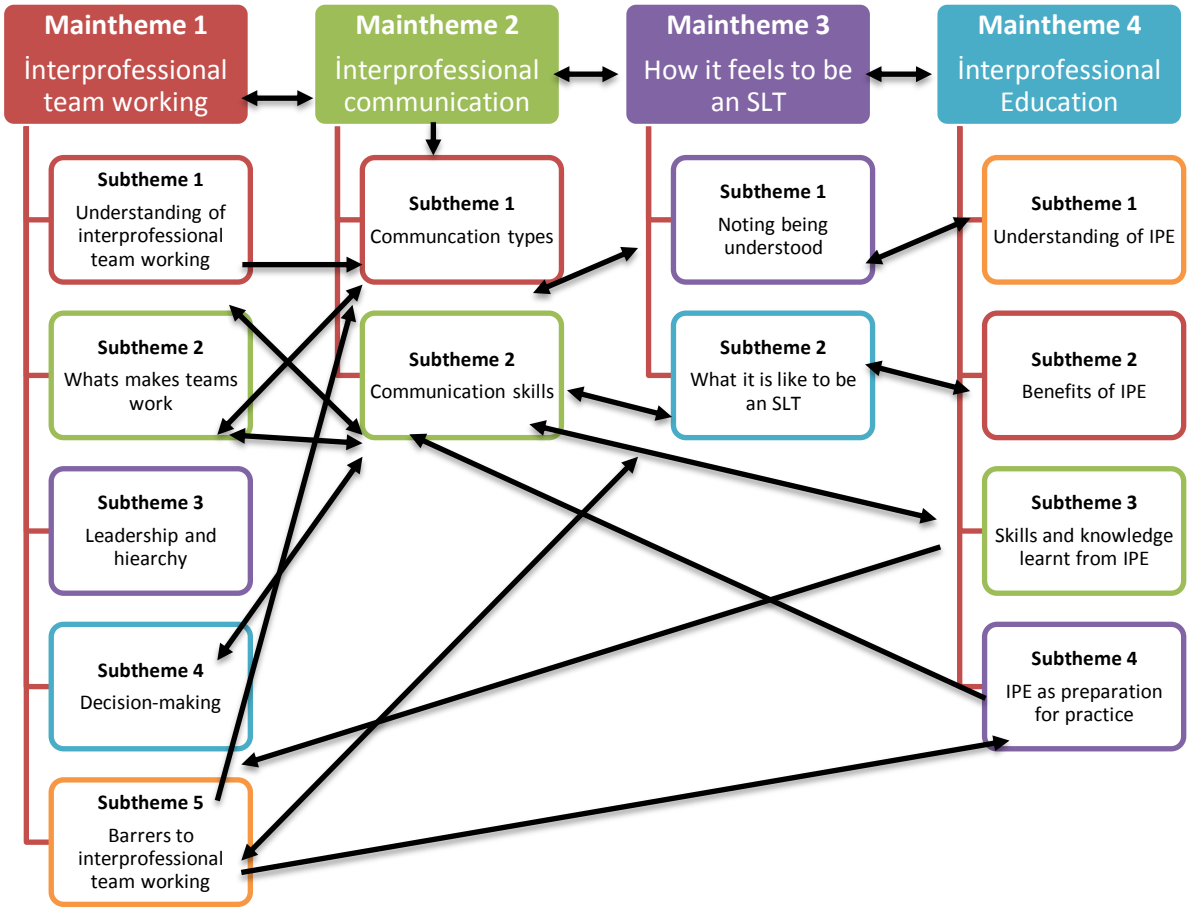


Figure 8.1: Theme and subtheme relationships

With reference to the complexity of the work environment experienced by many SLTs, this links directly to specific communication issues. According to O'Daniel and Rosenstein (2008:9)

> [a] *Large body of literature shows that because of the complexity of medical care, coupled with the inherent limitations of human performance, it is critically important that clinicians have standardized communication tools and create an environment in which individuals can speak up and express concerns.*

Standardization across the variety of environments in which SLTs find themselves is impossible. SLTs also mentioned that they felt alone when working within a team, and that most other professionals did not have an understanding of their role. Added to this, issues relating to leadership and hierarchy made them feel yet more isolated. As such, the theme of how it feels to be a SLT has a strong connection to subthemes including leadership and hierarchy and communication skills and types. Perhaps most importantly, the feelings of SLTs about their own professional identity and other professional's perspectives towards them had shaped their own interpretation of their role. The relationship to an understanding of IPE is as a potential partial solution to these problems. SLTs mentioned that IPE prepared them for IPCP, which means that the SLTs learned about the other professionals' roles, responsibilities and knowledge. This seems to have helped them develop their interprofessional working skills. IPE itself encompasses IPL and work activities, with a focus on communication and interpersonal skills. This again emphasizes communication as one of the main interconnected themes.

8.3 Discussion of key findings

Four key findings not mentioned in the existing literature emerge from this study. The first is that IPE provides SLTs with the opportunity to promote their role at a student level. According to SLTs, some of the teams they have worked with have no idea what an SLT does at a practical level, resulting in the SLTs' perception that gaining recognition by other professionals was an uphill struggle. Since they are a relatively small and circumscribed profession, recognition of their roles seems to be inconsistent, being greater on the part of some professionals than others. However, there are some exceptions, including professionals in a similar position such as occupational therapists and physiotherapists, where the situation is different.

The second finding illustrates that IPE workshops must be more realistic because real-world settings are so very different from university environments. At a university level, SLTs did not have enough of a real world understanding of IPCP to make the link between the theory and practice of IPE and IPCP. At a clinical level, there were not

enough opportunities to see and engage with different professionals. While the perspective of various professionals is mentioned in the existing literature, the views of SLTs on this matter have not been adequately covered.

The third research finding demonstrates that different personalities can have a considerable impact, both positive and negative, on interprofessional relationships. For example, some assertive personalities tended somehow to hinder interprofessional relationships, while other more collegiate ones could support and influence the interprofessional relationship for the better. In the literature, not enough evidence has been presented to underpin the effect of personalities on interprofessional relationships and collaborative practice.

The final key finding from this study relates to the resolution of disputes and the management of SLTs' complex work environments. The research has underpinned the importance of using their communication and diplomatic skills to resolve conflict in the best possible manner. SLTs' fresh perspectives could enable them to view matters from different angles and propose actionable solutions to improve real-life outcomes. With regard to the latter, SLTs spoke about having used their diplomatic skills to avoid or manage conflict within their teams. For example, some of the participants mentioned that they used carefully chosen words and means of communication when communicating with other professionals. This included their preference for meeting other professionals face to face in order to avoid the misunderstandings possible in written exchanges, a point that has again been overlooked in previous literature. In addition to this, the issue of SLTs' work patterns and employment across a variety of sectors, thus adding complexity to interprofessional teamwork, has not been addressed in the existing literature. Overall therefore, these four findings fill a gap in the existing literature in this field. It is hoped they might encourage further research in the areas of IPE, IPCP and SLT. This is discussed in more detail in in the Recommendations and Conclusion chapters.

8.4 Current research findings in some international interprofessional framework contexts

This section focuses on this study's findings and how they fit into an existing international capability framework for IPE/IPCP which has proved able to accommodate data relating to role clarification, team functioning, interprofessional communication, patient/client/family community-centred care, interprofessional conflict resolution and collaborative leadership. When the researcher began writing this chapter, he realized that much of the current research findings perfectly match a current IPE/IPCP framework. This was not anticipated. According to O'Keefe et al. (2017) there are six international competency frameworks in the fields of IPE and collaborative practice. These are:

1) The Canadian Interprofessional Health Collaborative (CIHC, 2010), which is a national interprofessional competency framework for Canada.
2) The Interprofessional Education Collaborative Expert Panel (2011), which is a core competency for IPCP. It is the report of an expert panel.
3) Interprofessional Collaborative, Washington, D.C. Combined Universities IPL Unit (2004). Interprofessional capability framework: a framework containing capabilities and learning levels leading to interprofessional capability.
4) The University of Sheffield and Sheffield Hallam University's Interprofessional Capability Framework: a framework containing capabilities and learning levels leading to interprofessional capability.
5) Griffith Health IDEAS (2011), an interprofessional framework for IPL at Griffith Health 2011-2014, Griffith University, Griffith, Queensland.
6) Interprofessional Education and Collaborative Practice, a curriculum framework in the University of Western Australia. This is an interprofessional capability framework focusing on safe, high-quality client-centred health services.

These capability frameworks have affected implementations of IPE and IPCP around the world. The present study has delivered results that match the CHIC well, because it

covers both educational and practical aspects. The researcher has suggested that the CICH could be adapted to help develop an interprofessional educational curriculum for SLTs at both pre- and post-registration levels in the UK. The CIHC National Interprofessional Competency Framework has a set of competencies that include the attitudes, behaviours, values and judgments deemed necessary for collaborative practice (CIHC, 2010). The six CIHC competency domains are:

- Role clarification
- Team functioning
- Interprofessional communication
- Patient/client/family/community-centered care
- Interprofessional conflict resolution
- Collaborative leadership

The present study's findings have been integrated into the competency domains of the CIHC framework. One of the main findings of the present research was the importance of knowing each other's roles and responsibilities in the context of interprofessional working. According to SLTs, IPE allows them to obtain an understanding of other professionals' roles, responsibilities, knowledge and skills. SLTs' experiences of IPE and collaborative practice clearly show that knowledge of others' roles and responsibilities could help with teamwork and promoting their role. "Collaboration is a developmental process, and therefore, IPL is cumulative over one's professional practice, reflecting a continuum of learning" (CIHC, 2010:12).

In line with the needs of a curriculum, the framework clearly defines the parameters of IPP and education. This is based on clear principles.

The findings related to team roles come within the area of team roles area encompassed by the CHIC framework, which states

> *Learners/practitioners understand their role and the roles of those in other professions, and use this knowledge appropriately to establish and achieve patient/client/ family and community goals.* (CHIC, 2010:12)

This statement, taken from the CHIC, clearly shows how team roles fit into this domain. Other main findings of the present study include favourable comments about a patient/client-centred approach, made several times by the SLTs. Specifically; they mentioned that families and clients involved in practice had a positive effect on the outcomes of that practice. They also indicated that the client's interests should be at the heart of their practices. As such, the SLTs suggested that patient involvement in IPE activities gave them a positive and effective model through which they could understand IPE and IPCP.

The SLTs also stated that IPE and IPCP gave them both a holistic view and a patient-centred perspective. According to the CHIC framework

> *Learners/practitioners seek out, integrate and value, as a partner, the input and the engagement of the patient/client/family/community in designing and implementing care/services*. (CHIC, 2010:13)

The experience of SLTs regarding IPE and IPCP has shown that SLTs worked in the patient's best interests using a patient-centred approach. It would appear that, for SLTs working in both education and practice, deciding whether to adopt a patient/client/service user- or student-centred approach will always be a matter for consideration.

Another main subject raised by the SLTs was team functioning, in which working with other professionals was a vital, but not, easy task. They stated that working with multiple, cross-sectoral teams made their interprofessional teamwork more complex. SLTs think that working with a variety of personalities and characters makes interprofessional working more challenging. Issues of personality present in mono-professional practice are also problematic. The nature of the SLTs' occupation obliges them to work in different sectors, teams and settings that could also affect their relationships and team working.

The CHIC framework mentions issues with team functioning. According to the Team Function domain in CHIC (2010),

> *Learners/practitioners understand the principles of teamwork. Dynamics and group/team processes to enable effective interprofessional collaboration.* (CHIC, 2010:14).

Teamwork has always been important for all health and social care professionals. IPE and IPCP present SLTs with opportunities to deal with their complex team working issues.

This study's findings repeatedly highlight the impact of leadership, hierarchy and decision-making. The SLTs thought that these depend on where the team in which they work is located. In some settings, they feel there is a stronger hierarchy than in others. Sometimes they feel more equal in one setting than another. This would therefore indicate the need to have a common, standard approach to dealing with this profession: the respondents explained that different work settings have different leadership mechanisms, which could affect both hierarchies and the decision-making process. One of the domains in the CHIC framework states that

> *Learners/practitioners understand and can apply leadership principles that support a collaborative practice model.* (CHIC, 2010:15)

If SLTs are to understand leadership and management issues at the pre- and post-registration levels, IPE and IPCP workshops and learning activities must include leadership and management subjects.

The importance of interprofessional communication also emerged as a key finding from this study. As a result of their professional background and training, SLTs have very specific and well-developed knowledge of, and views on, communication. They mentioned that interprofessional communication skills and types had a significant effect on teamwork. The CHIC framework has a domain regarding interprofessional communication, which states that

> *Learners/practitioners from different professions communicate with each other in a collaborative, responsive and responsible manner*. (CHIC, 2010:16)

According to the CHIC framework, communicating in a responsive, responsible and collaborative manner could help interprofessional communication between professionals. For the SLTs, educational training and practice related to interprofessional communication as provided by institutions at pre and post-registration levels have proved important.

The data obtained from the SLTs shows that communication in various contexts is more important for them than the other aspects of working together. Also, IPCP activities at post-registration level must cover interprofessional communication activities. This could amount to training SLTs to communicate with other professionals in a "responsive and responsible manner".

Finally, interprofessional conflict resolution was mentioned many times by SLTs under the main theme of communication. According to them, managing disagreement in different settings is part of a team's needs, skills and knowledge. Some said that diplomatic skills and the use of appropriate communication methods and skills helped avoid conflict within interprofessional teams. The CHIC framework includes the domain of Interprofessional Conflict Resolution, which states that

> *Learners/practitioners actively engage self and others, including the client/patient/family, in positively and constructively addressing disagreements as they arise*. (CHIC, 2010:17)

This study has shown that SLTs have the diplomatic communication skills with which to communicate with other professionals. They have tended to use these conflict resolution strategies to resolve possible conflicts within their teams. There was not enough evidence, however, to show that these skills were learned from the IPE workshops. As a result, this must be emphasised and possibly be seen as a measurable professional practice outcome.

To sum up, some of the study's findings fit perfectly within the CHIC Framework of Capability. This clearly indicates that the Framework should be used as a basis for IPE and IPCP activity design for SLTs and other allied health professionals.

Unfortunately, however, there are no published examples of institutions having used that framework to develop an IPE curriculum for SLTs in the UK. Although DMU is an exception, even here, although there is an overlap, its IPE curriculum was designed before the CHIC Framework was developed.

8.5 SLTs' experience of mono-professional practice

In current conditions where communication is key to every conceivable problem, SLTs have emerged as a distinct class of health professional who can improve the way individuals communicate. The data generated from the present research shows that clients come first for SLTs, and their understanding of team working is one in which their mono-professional team works with other SLTs, whether in children's or adult services. In this manner, insights are gained into the job type and life of SLTs. According to interview data, participants tended to explain their current mono-professional practice in the following ways:

- They put clients at the centre of what they did in a typical working day and in terms of how they worked with their clients. This means that they viewed their clients from mono-professional perspectives. In practice, this means playing an important role and engaging in various activities through direct interaction or supporting activities. In the current scenario, this amounts to developing assessments, checking and updating assessment procedures, talking with clients and conducting therapy sessions, all of which forms the primary activity of an SLT.
- SLTs are also expected to prescribe proper care plans and provide credible support to their fellow caregivers. The key point that emerges from SLTs' contributions is their understanding of who their team is. They generally tend to reinforce the idea of a mono-professional team. For instance, if the researcher asked a question related to teams, they automatically started talking about the group of SLTs working within a region. This clearly showed an understanding of the team to mean mostly their own mono-professional teams, specifically other professionals working in the same discipline, albeit not in the same setting.

8.6 The experience of SLTs in interprofessional team working

One of the main research questions regards the SLTs' experiences of interprofessional working. According to the present research findings, there are several main areas from which the themes emerged. These are IPE, IPCP, interprofessional communication and professional identity issues of SLTs, complexity of work, and personalities. This will be discussed in depth, together with details from the findings.

IPCP was one of the major themes that emerged. IPCP has become a necessity in the health care sector, whose objectives include health improvements, patient care and affordability of health care for patients. The SLTs' understandings of interprofessional working depended upon their various work settings. The present research has highlighted new findings through the participants' responses to the research questions related to interprofessional teamwork, showing that most SLTs have positive attitudes towards interprofessional teamwork. This is similar to some of the theories maintaining that unique IPCP practices can play a significant role in improving health care service delivery through proper intervention (Zierler, Blakeney and Brien, 2017). This research has documented improvements in the functioning of teams, with IPCP meetings between hospice providers. An interview conducted on 24 service providers revealed the ability of meetings to improve service quality and assist in holistic care. However, there were concerns that meetings were not always efficient as a result of constraints on content and a lack of participation. Some modifications and uniformity could help address this (Washington et al., 2016). Providing the best services for patients and sharing patient information with other professionals gives SLTs a holistic view of working mechanisms. It also helps them better understand child and adult needs and other professional perspectives. Marris (1986) uses psychodynamic theory to describe loss and change, and Holman and Jackson (2001) use Marris's theory in their study involving seven interprofessional workshops for staff caring for older adults. They find that interprofessional communication has a powerful effect on social care. Ineffective communication can lead to confusion over roles, thereby negatively affecting both performance and outcome. Alternatively, effective interpersonal communication can produce positive outcomes through an increase in motivation and enthusiasm in health

care workers such that they can provide a high-quality service to patients. Some positive responses regarding interprofessional teamwork were made by SLTs. They used expressions regarding the importance of caring such as “everyone gives their input, it is very important”. They also stated the importance of prioritizing patients, saying that the professionals from the various collaborating contexts must focus on positive outcomes for their patients. Elspeth (2012) reflects this view, stating that cross-sectorial SLT has positive outcomes on education and therapy professionals.

Professionals in the education and health/social care sectors must communicate with each other and share their knowledge. Nancarrow (2013:1-2) identifies ten characteristics underpinning effective interdisciplinary team work: positive leadership and management attributes, communication strategies and structures, personal rewards, training and development, appropriate resources and procedures, appropriate skill mixes, supportive team climates, individual characteristics that support interdisciplinary team work, clarity of vision, care quality and outcomes, and respecting and understanding roles. The participants noted that positive leadership and personalities did have a positive impact on interprofessional teamwork. A majority stated that personalities, equality and atmospheres in their workplaces were important issues, while some held that the ease of working with professionals varied.

Some barriers to interprofessional team working were also mentioned by the SLTs. According to them, organizing people from multidisciplinary backgrounds was problematic. There was sometimes a lack of space, rooms, equipment and time, while language could also cause some difficulties, making it exceedingly stressful to arrange matters properly. The fact that various types of staff needed to come together in the same place at the same time made the results dependent on luck. The nature of the SLTs’ practice and organizational/systems approach could affect this collaboration.

On the educational side, Gilbert (2005) argues that structural changes are needed in universities if the results of IPE education are to be made accessible to patients, clients and professionals. This would involve shaping the notions of students and others in such a way that a sustainable collaborative system can be formed which can then help

develop a permanent place for the collaborative learning practice". Health care professionals must also be trained in a range of disciplines in order to gain real collaborative insight and to become competent health carers. Healthcare provision requires excellent coordination between practitioners, which is only possible through such education. However, students are in practice not trained to this degree, primarily due to cultural barriers (Pecukonis, Doyle and Bliss, 2008). According to theories and research findings concerning how to avoid barriers within interprofessional teams, the best use must be made of IPE and training, ensuring that professionals are trained together in order to deliver best IPCP. The experience of SLTs in interprofessional team working has been discussed. The next section will focus on the complexity of SLTs' work patterns and settings in IPCP.

8.7 Complexity

As the nature of SLT practice dictates, SLTs are simultaneously required to work with a range of teams, professionals and sectors at the same time. Some work in the education services and health services at the same time, while others work in social care and the criminal justice system. This adds a number of complexities. This section focuses on the complexity of SLTs' work in several dimensions.

Some participants felt that they did not have a sense of belonging within teams because they sometimes worked at three places, and as a result they did not have their own spaces in which to connect with other professionals within their workplaces. Such situations affect professionals' confidence, efficiency and sense of continuity. Gum at al. (2012) identifies some of the main barriers to interprofessional communication as poor design and lack of space and privacy. Well-designed places and workspaces would encourage all members of a health care team to communicate with each other in order to promote interprofessional collaboration. The first challenge identified was that professionals who needed to work closely with SLTs were located in several places. This made it difficult for the SLTs to integrate. They used phrases such as "in a situation where we are not placed", "you're much more isolated from the MDT", and "we're quite often mobile." Brewer, Flavell and Jordon (2016) discuss this, stating that

the outcome of IPE is expected to be an increased rate of return on investment in this aspect, provided that IPE practice is sound and can change students' perceptions of collaborative practices. A specific example of the challenges posed by environments could be the culture of a hospital that is entirely medical in nature. Hall (2005) states that different health care professionals have different identities, cultures, values, beliefs, attitudes, customs and behaviours, which conforms to this observation. These differences affect professional relationships and communications, as well as the educational experiences and socialising process encountered during the training of health professionals, which in turn shapes their professional cultures. Marshall at al. (2011:4) point out that

> *Language can impact significantly on the ways in which health care professionals relate and provide clinical services, as well as the way in which patients conceptualize their role in the health care encounter*.

This suggests that using difficult jargon can sometimes cause problems for communication and interprofessional interaction. IPE practice can help decrease the cost of learning, enhance patient care and improve the quality of health care by helping address this. However, it remains to be seen how intervention can be carried out so as to create supportive specific settings. An understanding of social practices and processes is required to fully understand how that input could be provided (DiazGranados et al., 2018). The data shows some SLTs maintaining that open communication between managers and team-leaders was important for healthy interprofessional relationships. Chosen communication types sometimes caused issues between professionals. This indicates that greater emphasis should be placed on the way people communicate and interact with each other. The SLTs thought that effective collaboration would certainly be in the best interests of the service user. Some were also of the opinion that their mobility made them more accessible, which confers an advantage. It would not take much effort for the service user to find them, and even if they do miss a session they can potentially quickly make it up.

The research did however reveal that some working place were spread over large areas, sometimes making it difficult for the SLTs to receive information at the proper time and place, thus affecting the way in which service users receive their therapy. SLTs felt that the fact that they were not all from the same place and did not get enough time to communicate with others did not help their cause.

This is consistent with the findings of Baxter (2004), who stated that working in various settings with different clients has a considerable effect on the communication and interprofessional work of SLTs. Alternatively, Gum (2012) states that communication and interaction barriers are related to poor design, lack of space, frequent interruptions and a lack of privacy for health care professionals. The SLTs were of the opinion that it is the duty of those mediating between the patients and the SLTs to ensure that the knowledge gathered is applied effectively. The SLT would sometimes do as much as they could to ensure that whatever is required by a particular class is included in the reader's knowledge stream. According to the SLTs, various work settings have different leadership and hieratical systems. They used expressions such as "…are perhaps some members who are quite hierarchical", "I think they see us as equals and really value our opinion" and"It depends on my particular role for the client" to illustrate hierarchy within their interprofessional teams. Kent's (2018) exploratory research study illustrates this. It focuses on IPE initiatives taken by a metropolitan health network involving clinicians who were part of the process of designing the activities. Communicative inputs were taken using an interview process, which revealed three key themes for the development of IPE activities. These were leadership, hierarchy and organizational and systemic factors. The leadership and hierarchical issues ranged from IPE activities to the collaborative practice level. A specific example is the health sector.

Educational environments were viewed positively, being perceived as easy places to work in. With regard to medical settings, consultants make the ultimate decisions and take responsibility for them. Lingard (2012) discusses this, highlighting the ways in which interprofessional teams attempt to achieve common goals. His evidence indicates

that the actual enactment of collaborative leadership is indeed a challenge. Doctors think that their teams function in a non-hierarchical manner; however, reports from non-medical professionals suggest that there is some hierarchy in their teams. Indeed, Lingard (2012) sees the observational data as revealing that those hierarchical behaviours persist, even from those who most vehemently deny the existence of hierarchies in their teams. This shows clearly that working in multiple settings causes increased complexity for SLTs. Different countries have used many settings and multi-professional work integrated care models for their health care provision. Health and social care are integrated in many countries through the provision of primary care, community programs, hospitals and social care. However, the process changes do not necessarily guarantee delivery benefits. Facilitation can help build collaborative relationships so that transformational changes can be achieved. However, this would not independently enhance the quality of care, and may need support from learning and development. Some key elements that are used in an integrated approach to facilitation include work-based learning, improvement, development, innovation, social care and knowledge transfer (Martin and Manley, 2018) Integration of services and working in different environments could cause SLTs some complexity. Different settings and sectors produce different leadership models and hierarchical structures.

To summarize, the impact of timing and workplace effects on complexity have been discussed, alongside comments from SLTs regarding the lack of equality in some settings. This has resulted in further complexity. Hierarchy and leadership issues result in multiple workplace settings. Despite this, SLTs maintained that they saw working in a team with different professionals as a positive experience. During the course of this research, SLTs noted sometimes feeling the effect of such hierarchies as they moved between settings. For example, they felt it more keenly in the NHS than in schools. Band levels are a one of the main parameters and indicators of hierarchy with regard to professional culture, social capital and the stereotypical views of various professionals. The next section will focus on negation and relationships.

8.8 Negotiation and relationships

When SLTs interact and work with professionals from various fields, some complications and complexities result, as discussed in the previous section. This section will focus on SLTs' negotiation and relationship skills as used to minimize the impact of such complexities. It will begin with an analysis of the SLTs work with some professionals, and how this is easier than in other contexts. Their knowledge of the others' roles and responsibilities, communications types, professionals (including their personalities), decision-making processes and leadership and hierarchies in negotiation and relationship process, is essential to their effectiveness in the various working environments in which they find themselves.

8.8.1 Working with some professionals is easier than with others

Most of those who participated in the interviews reported collaborating with pharmacists, doctors, psychologists, teachers, psychotherapists, paediatricians and other professionals. These fields require working alongside a number of active SLTs who could help those in need of therapy. Schools and rehabilitation centres were also among the primary collaborators. This is consistent with Reeves and Lewin (2004), whose activity theory explores the nature of teamwork in relation to temporal-spatial pressures, focusing on building relationships between professionals in relation to formal and informal communications. Freeth et al. (2006) uses activity theory in their work on interprofessional sessions delivered to different professional group working in maternity settings. They find that informal interprofessional communication between professionals can shape care outcomes.

Two studies (Barnes and Turner, 2001; Kennedy and Steward, 2012) have examined the specific collaborative relationships between teachers and occupational therapists. While reporting frustration at not having formal collaborative meetings with occupational therapists, teacher participants nevertheless understood that their counterparts' high caseloads made it difficult to schedule regular meetings (Barnes and Turner, 2001). The SLTs acknowledged that one SLT can perform a variety of roles within their IPCP. To that end, it is imperative to have good communication channels with all professionals.

Analogously, Allport's (1954) theories of social psychology describe the tensions between group members. Groups require equality, common goals and cooperation. Common goals, or those shared by different professionals, give patients a good quality of care. Allport's (1954) theory of group dynamics facilitates understanding of different dynamics between interprofessional team members. According to the present findings, SLTs felt more comfortable when they worked in the education sector and with other allied health professionals. However, they did not feel so much at ease in medical settings.

Jains' (1982) and Tuckman and Jensens' (1977) group thinking theory, Challis et al's (1988) social exchange theory, Axelrod's (1984) cooperation theory, Drinka et al's (1996) relational awareness theory, and West's (1996) team reflexivity theory are important in the field of interprofessional collaboration. All these related theories have helped the present researcher understand why interprofessional relationships between team members are important for delivering quality care. Group thinking theory helped him envision health and social care professionals as a wider group and realise the dynamics between them. Social exchange theory, cooperation theories and team relaxation theories alerted him to the importance of the communications between team members, and how groups could shape their teamwork. The present research has discovered that team working, working in a variety of teams, and group thinking and social exchange theories could explain settings. Being part of a team other than their mono-professional teams or interprofessional ones helped the SLTs understand team dynamics and relationships within their teams and with others.

Communication with others was not an equal process for SLTs. For example, they held that working with professionals such as OTs, PTs, psychologists and dieticians was easier than with consultants and medical professionals. Some SLTs explained this situation as attributable to various personalities and settings. Interprofessional approaches to health and social care are linked to improved clinical service and enhanced problem solving (Mitchell et al., 2010).

8.8.2 Understanding each other's roles and responsibilities is crucial

The SLTs thought that understanding each other's roles and responsibilities was crucial in order to negotiate well and build strong relationships. Some of the SLTs had very positive experiences within education services, whereas others had negative experiences within the health sector. Workplaces can include schools, nursing homes; rehabilitation centres and works with special needs children. Within a school-based team, the lead would be the SENCO or the head teacher. As the co-ordinators, these would speak to the SLTs to obtain a basic overview of the process, understand the success of the work with the various teaching assistants, and obtain referrals for the children. If a staff member does not understand an SLT's referral, or needs clarification, they can easily approach the SLT because they know what days they would be available and where to find them. Hartas (2004) says, "Collaboration is a key aspect in developing effective educational provision for pupils with special educational needs." In the context of teacher and SLT collaboration in schools, the present research found that teachers and SLTs view collaboration as a formal and distinct activity that can only occur at a specified and dedicated time and space, which encourages individuals to engage in prescribed activities while remaining within their own professional boundaries. The implications for policy and practice are discussed later, and issues for future research are outlined.

Similarly, the SLTs thought that the only time available for interprofessional relations with families and other education professionals was formal meetings such as annual meetings or pupil assessments. Most SLTs had some opportunity for interprofessional communication within interprofessional team meetings and case meetings. The most common issues mentioned by SLTs included understanding each other's roles and responsibilities. This is also evident in work undertaken by Benne and Skeats (1948 as cited in Payne 2000), who found that three important factors affect team roles: the behaviour of the team members, those members' skills, and the extent to which their role was helpful or unhelpful.

The behaviour of team members is an important element in determining the quality of communication within the team. Individually, the professionals' perception of their role, whether helpful or unhelpful, affects their satisfaction and performance. Some participants mentioned that increased understanding of other professional's roles and their own boundaries, and that knowing each other both formally and informally, could help them communicate better with other team members. Engestrom et al. (1999) has developed activity theory, which interprets interprofessional and inter-agency relations at a micro and macro level. With regards to the importance of communication skills in the context of negotiation and relationship building in an interprofessional environment, the SLTs expressed their strong feelings on the importance of the communication in many ways, as discussed earlier in that section. Their view is at least implicitly supported by Southill et al. (1995), who points out that communication between professionals, and between them and their clients, positively affects the quality of care and the utilisation of resources. The SLTs mentioned that communication with other professionals and clients was important and had a positive effect on care outcomes. According to Verhaegh et al. (2017), interprofessional collaboration can make patient care more effective and safe through discussions on clinical problems.

On the other hand, SLTs mentioned that different settings and teams come up with different cultures and systems. Verhaegh et al's (2017) study involving three focus group discussions held to understand what is considered to be ideal found that spatial and social structures could influence collaboration. It was found that communication routines were embedded into practices, and also that some repetitive patterns which had caused failures now needed improvement (Bardach, Real and Bardach 2015).

To improve communication, SLTs mentioned some skills, which they believed to have an important role in building interprofessional relationships. The key communication skills mentioned by SLTs include understanding others, good listening skills, flexibility, friendliness, adaptability, willingness to share information, pushing to cater for the interests of patients, and an empathetic attitude. Flexibility and adapting to others' ways of working were also considered important in a team. This is discussed in a study (Thompson et al., 2015) of 68 pharmacy, nursing and medical graduates from three

Australian states focusing on interprofessional teamwork and communication. The students were able to comprehend the importance of teamwork, communications skills and relating to other professionals. In the present research, SLTs mentioned the importance of communication skills, team working and interprofessional relationships. This research has also revealed the link between SLT and parent and teacher collaboration, as well as the importance of team working, which is mentioned earlier in this section.

8.8.3 Methods of communication

According to the participants, there are several ways in which team members communicated with each other, including face-to-face meetings, email and phone calls. 18 of 21 identified face-to-face communications as their preferred method because of the difficulties associated with emails, phone calls and texts when explaining points. Leicester's IPE curriculum mainly addressed face-to-face communication in groups. Communication is key in working environments, with a fundamental understanding of the professionals' roles needed in order to conduct flawless communication. The SLTs need a combination of organizational skills, patience and analytical skills to conduct assessments. All these entail communicative competencies such as the ability to share views through reports or email. In addition, interprofessional working is imperative within the SLTs' work in children's services. It highlights the number of skills required to work with children. It is also important to remember that since they mostly work in schools, the school itself plays a major part in this process.

With specific reference to doctors, the personalities of professionals tend to affect interprofessional communication in particular and communication as a whole. This requires an attitudinal change in doctors and pharmacists to ensure that equal importance is accorded to SLTs in order to address the universal incongruence between the two. Correspondingly, SLTs must be assertive when communicating in order to counter the tendency constantly to doubt them and to ensure that their opinions are taken seriously. Sargeant et al. (2011) state that the communication skills of health care professionals could improve with formal communication skills training. Communication is also important because of the nature of the work undertaken by

multi-disciplinary teams on a case-by-case basis, as they are fundamental to intersecting relationships. Communication is essential for some SLTs with rotational professional roles, as those roles require the ability to explain matters in layman's terms and to understand other people's perspectives, including those of parents and teachers regarding both a child's performance in the classroom and how this could be improved. In general, SLTs must be assertive enough to put their views across to the team, because they are constantly subjected to doubts about their opinions on certain subjects.

8.8.4 Working with some professionals is challenging

For the SLTs, working with some professionals was challenging because of the challenging personalities. Curren et al. (2010) highlight the fact that different professionals have different attitudes, which can affect their professional practice. Some participants experienced difficulties working with certain classes of professional such as doctors and pharmacists. This shows that professional cultures and attitudes affect interprofessional working. Interprofessional teamwork also depends on the particular role of SLTs when working for particular clients. In these cases, their role concerned care coordination. In others, since they were part of the team, they performed their professional tasks but did not engage much in care coordination. For yet others, it was just another part of their rotation between teams within a hospital. They would work in situ for six months before being promoted. With this went an organisational mindset they all adopted in order to develop as speech therapists.

They felt that it was good for patient outcomes because everybody could work together and become aware of their needs as individuals. Martin (2008) also observes that when school and SLT staff works together they learn together. This potentially affects the outcomes of SLT in school settings. The respondents stated that challenges arise when they tried to offer CPD opportunities to educate the staff about the role of the SLTs. Due to the type of hospital where the relevant patients are found, it was similarly quite challenging to persuade staff to commit to SLT tasks. It can thus be concluded that some aspects definitely need improvement while others are more accommodating.

The main point for consideration in this particular area is that the therapy and the time taken for rehabilitation can take years. When patients left the facility, they often had to attend other rehabilitation centres. The SLTs thought that agreed outcomes for patients were generally realistic. The study thus reveals the importance of communication, which, according to the Joint Commission (2010), was identified as the leading contributory factor in medical errors. Furthermore, according to Leape and Berwick (2005), interprofessional communication is extremely relevant to multidisciplinary teams engaged in the organization of care delivery. For SLTs' formal and informal communication, face-to-face communication in particular could help foster interprofessional relationships. One of the important processes for interprofessional relationships was decision-making. This will be discussed in the next section.

8.8.4 Decision-making

Attention now turns to how negotiation and relationship-building skills can support decision-making. According to the SLTs, decision-making affects interprofessional teams and their relationships. This will be explored with a focus on how to improve the process for patients, the difficulties of interprofessional decision-making and the impact of decisions made without considering the input of SLTs, parents' values and perspectives on the decisions made, as well as the differences in interprofessional decision-making.

Shared decision-making can assist in the creation of knowledge and can bring about synergies that have a positive effect on patient care. However, an understanding of the application of shared decision-making in a critical care unit is rare. An exploratory study of 22 team members in interprofessional groups investigated the practice of shared decision-making within intensive care units in Canada. Four key participant roles were identified: parents, clinical experts, leaders and the synthesizer. Dunn et al. (2018) states that shared decision-making is achieved through collaboration, sharing and the weighing of alternatives. Students attach different values to their work; especially during the initial years of their working lives, this can influence their decision-making, as found by a study conducted on 311 students (Nagao et al., 2017). During the decision-making process the SLTs thought that confidence played an important role.

With this in mind, Morison at al. (2011) states that a lack of knowledge regarding professional position and team roles and responsibilities would have a negative effect on professional practice and confidence. The SLTs observed that when someone was newly qualified, confidence played a significant part, because sometimes they would have a lot to say but did not feel confident enough to say it, especially in the presence of experts who had been in their positions for many years. They felt that when an SLT had confidence in what they were doing, their ability to voice their opinions on what was potentially right or wrong would be enhanced. The SLTs could see how their skills came together to help the patient accomplish their ultimate goal. There is thus satisfaction to be had from realizing that the team works together for the common goal of patient satisfaction and quality of life. A study of 53 research professionals was conducted to help identify their core competencies for shared decision-making, along with 16 older people. It explored their experiences with a view to identifying and including the key elements within a teaching framework.

These key elements were practical training, collaboration, facilitation, knowledge creation and patient engagement. The framework was found to be very useful for clinicians and educators promoting Shared Decision-Making (SDM) for older patients (Icon et al., 2017). According to the participants, SLTs did not have a say in final decisions because they generally gave their views about the client to the head teachers, consultants or psychiatrists, who then made the decision. Some SLTs also highlighted their apprehension regarding decisions because they felt that, in the end, everyone disagreed. Several approaches were used to arrive at a decision, which often involved working in different settings, with clients who had a variety of needs, and with a variety of professionals. The SLTs used terms such as “you make that decision jointly together” and “make a decision from there jointly” to show interprofessional decision-making. This indicates the high value accorded to joint and collaborative work between professionals in the multi-disciplinary context of medical provision. SDM allows professionals and patients to influence each other when making health choices. It thus gives individuals more control over the care they wish to receive.

SDM practice is embedded in several health care approaches. It is a dynamic process by which health care and patient influence each other in making health-related choices or decisions. It is advocated as an ideal model because it provides individuals with more control over the health care they choose to receive, and has also been shown to improve patient outcomes. However, very few studies can prove the impact of SDM on the outcomes of patient care (Tousignant-Laflamme et al., 2017). This brings the significance of interprofessional working to the fore, a mode of working that has been perceived as a balance specifically between traditional power holders and other clinicians. 36 rehabilitation practitioners from Australia providing spinal cord injury repairs participated in an experiment involving different control groups before and after training (at three and six months).

Ethical decision-making was found to improve following training offered to one group, while no change was observed in the other who received no training. In a more traditional structure, changes to decision-making could be devastating. The mono-professional practice model was considered as a traditional system for SLTs, and has been challenged by making or suggesting some changes for newly qualified SLTs. However, the process of monitoring this was presented as unofficial, negotiated and context-specific. It should be understood that in addition to a clear need for more standardisation in various aspects of advanced practice, there must be an augmented value for unique profession- or role-specific practices such as SLT. The research found that in meetings, especially those in which decision were made amid disagreement and conflict; the final arbiter would be the doctor, since they are the ones who make referrals.

Another barrier to interprofessional decision-making was when clinicians made a decision without considering the input of SLTs. For example, in a hospital, the doctor was seen to make environment-based decisions. Instances of this are illustrated by comments such as: “definitely an air of the medics have the final decision.” The UK government has encouraged health care staff to bring collaboration into practice through the introduction of appropriate policies. However, the impact of these changes on staff and patient care are not fully understood. Studies have found that levels of professional

knowledge and skills have had some influence upon interprofessional working in the health care unit (Brumfitt and Baxster, 2008). The participants said that their opinion regarding clients was sometimes not considered professional, and that doctors sometimes did not know what the SLTs role should be in relation to those clients.

Some SLTs stated that differences had a considerable impact on interprofessional decision-making. Here, various perspectives and values could present great opportunities for joint decision-making. SDM plays a significant role in providing customer-centric care in an interprofessional context. A study conducted on 31 health care service providers through semi-structured interviews identified specific barriers to SDM, such as the mental health of a patient and treatment given them during their care (Chong, Aslani and Chen, 2013).

In the course of decision-making and interprofessional team working, some disagreements and conflicts had the potential to affect negotiation and interprofessional relationships. Conflict resolution and the theories underpinning this are directly relevant to such issues and will now be discussed.

Most participants mentioned having a good working relationship with team members. Working in a team usually tends to involve differences of opinion that must be identified and resolved in a variety of ways. An example of this is the diplomatic skills of professionalism, language and awareness of each other's roles. Laschinger and Smith (2010) state that authentic leadership and structural empowerment might affect IPCP in nursing specifically. They argue that new leadership must still be more group-based and must share power with other team members. According to SLTs, open discussion with patients and professionals would yield mutually beneficial outcomes. Any differences of opinion could be resolved through voting. This is what was supported by most team members. Usually, this involved brainstorming the different ways in which targets could be met. The research data did not reveal any obvious differences. The SLTs and the doctors had conversations in which they determined whether a particular remedy or course of action was good for the patient or not. The majority of SLTs highlighted the inhibitive outlook of doctors on collaboration, with a lack of knowledge regarding the

potential effects of speech therapy. The factors limiting collaborative practice include professionals' multidisciplinary backgrounds, lack of space, rooms and equipment, and a mismatch in professionals' work schedules as regards culture, diversity, language, time and workplace-based variation. Time, place and professional culture have a considerable impact on interprofessional working, as previously discussed. Hind et al. (2003) use three theories of social psychology: Realistic Conflict Theory (Brown et al., 1986), Social Identity Theory (Ellemers et al., 1999) and Self-Categorization Theory (Turner, 1999) in their study involving five professional groups. According to Reeves et al. (2007), Discourse Theory describes culture and language, while Foucault's (1972, 1979) theories of social power, discourse and surveillance have also been utilised by the literature on inter-professional interaction. This shows the implications of bureaucratic organizational structures and power within interprofessional communication.

8.8.5 Leadership

At this point, the power relationship between team members, leaders and hierarchy must be appreciated because of the impact they also have. The SLTs mostly thought that they worked at the same level, but assumed different roles within the team. Working in medical settings sometimes brings conflict and problems related to hierarchy for newly qualified professionals. The focus here will be on the findings of the present study and their relationship to the existing literature on these issues.

Most SLTs observed that they all worked at roughly the same level as other professionals. They used terms such as "I think it comes naturally" and "I feel it is quite equal", but they all had various roles in different teams that determined their hieratical positions and shaped issues with leadership. They used terms such as "she was a central person that knew all these other people" to illustrate this. In educational settings the SENCO would be the leader, while in health and social care settings more general psychiatrist and in some cases even adult nurses, could be team leaders. Social leaders must address issues raised by the confluence of a variety of social factors by developing collaborative competencies that can then create opportunities for social educators as they pave the way for innovative IPE. An integration of such IPE into the school

curriculum can bring institutional benefits to an organization through the creation of a social work culture (Rubin, 2018).

A scoping study on the subject of leadership critically reviewed 114 articles on interprofessional leadership in the domain of health care. Most of the articles covered in the literature section of the research failed to provide clear definitions or theoretical underpinnings for leadership capabilities in health care settings. The articles mostly explored leadership qualities in students, but not actual leadership practice at higher hierarchical levels. Understanding interprofessional leadership in health care practice thus still requires deep exploration (Brewer et al., 2016).

Distributed leadership models are often used in the health care sector and have been explored in several studies. However, the views of clinicians and other professionals have rarely been investigated. Their beliefs about leadership can be associated with the team and related to their professional strengths. A survey by Forsyth and Mason (2017) on 229 professionals in England regarding leadership beliefs found a positive association between shared leadership and professional identification, especially in cases where participants had strong professional identifications. It can thus be said that strong team identification reinforces the spirit of shared leadership in professionals, but further examination of leadership practice is needed (Forsyth and Mason, 2017).

Another previously mentioned factor that has caused problems with power is the banding system, in which management sits at the highest level and provides leadership and supervision in mono-professional environments. The use of shared leadership models imparts specific benefits for health care, but only a few studies have explored these leadership benefits in the field. However, an online survey conducted on 229 health care professionals working in eastern England identified a positive relationship in individuals between leadership and professional identification. It can thus be said that strategies can promote personal identification and also help in shaping shared leadership. However, research may still be needed to ascertain leadership practice amongst health care professionals in order to apply this link practically. Personal identification and shared leadership are still two important concepts in the study of IPE

(Forsyth and Mason, 2017). As suggested by the participants, people at higher levels of management can provide guidance to those who are at lower hierarchical levels. It is therefore important that their contribution to the development of a new entrant to the sector be duly considered. SLTs thought that leadership in their settings depended on the case and the personalities of the leader. However, systemic and organisational factors sometimes created hierarchical issues concerning health care professionals.

8.9 Professional identity

The present findings reveal much concerning SLTs' professional identity with regard to themselves and how others see them. The study finds that, as a small and distinct group of professionals, SLTs feel responsible for explaining their roles and responsibilities. This section focuses on those explanations, including how they feel about their jobs, not being understood and what it is like to be an SLT, together with the theories underlying those thoughts. According to the SLTs, explaining their role to other professionals in an interprofessional environment is sometimes like "banging your head against a brick wall". SLTs are a small and relatively unknown professional group. This caused some problems when working in various settings. This also adversely affects their professional identity and attitudes when working in various teams. There was a feeling of being forgotten or a lack of acknowledgement by other professionals. They used phrases such as "constantly being forgotten about", and that the newly qualified professionals "don't understand their role". Other professionals showed a lack of awareness, or did not acknowledge that SLTs could be seen as medical professionals. The data indicates that some working in multi-functional teams were very keen to obtain input from speech therapy while others did not value such input at all and did not consider it an important part of a patient's management, which made it more difficult. For a team-based health care approach to be efficient, all team members must understand one another's roles to maximise team collaboration and efficiency (D'Amour et al., 2005). There is also a global demand for quality health care that can be met only by a patient-centred approach. A culture of values and sound principles must therefore be practiced in health care units by the entire team that serves the patient; collaborative practices can make this possible.

According to the SLTs, other professionals' opinions of their work have been an important factor in driving effective communication and interprofessional working. It has been noted above that some people appreciate SLTs and some do not. An IPE and IPCP approach improves team-based communication culture and fosters an understanding of each other's roles and responsibilities. In the present study, SLTs said that awareness of each other's roles and boundaries had a great impact on their communication with other professionals. A majority of respondents working in the NHS who answered the open-ended qualitative questions clearly showed a desire that their individual points of view be respected. Correspondingly, the findings of Lumague et al. (2006) suggest that IPE encourages and cultivates that respect, resulting in an enhanced knowledge of the diverse roles played by the members of multi-disciplinary health care teams. Suter et al. (2009) concur that respect and trust among team members is enhanced by the development of a mutual understanding of each other's roles and responsibilities. This was also evidenced amongst the research participants in IPE in Senette et al's (2012) study, which used simulation to extend support for hands-off communication as well as teamwork initiatives. IPE was known to influence their responses and to affirm the case for positive collaboration and an intention-to-act with regards to hands-off (i.e. more distant) communication. This, in turn, translated into greater patient satisfaction.

These findings lead the present researcher to conclude that IPE-oriented activities can and should constitute an essential part of nursing and allied health professional educational curricula, as corroborated by a previous study (Titzer, Swenty and Hoehn, 2012). This viewpoint is in agreement with the results of Baker et al. (2008), Dillon, Noble, and Kaplan (2009) and IOM (2010). These researchers acknowledge the use of simulation and IPE as effective teaching strategies, especially with reference to early co-education of students from diverse health care professions. Indeed, in order to fulfil the demands of the curriculum, instructors are increasingly embedding IPE in the activities used for running their academic programs. This integration was implemented on a small scale as an online class activity, introduced to students to augment their perception of the knowledge gap (Wallace and Benson, 2018). In social work, such

integration is also seen in service provision, given that collaborative treatments are used for serving the patient care needs of children with delayed development. However, the literature still lacks information on the quality and quantity of such collaborative practices. A need for collaborative multidisciplinary services is clear (Edwards et al., 2015).

8.10 Personalities

The role of personality in determining conditions is a further factor revealed by the present study. SLTs stated that different personalities are associated with, or indeed produce, different atmospheres. This can influence their work positively or negatively. Some participants mentioned that skills, team atmosphere, personalities and awareness of each other's roles and responsibilities are congruous with the ten principles outlined by Nancarrow (2013), as previously discussed. In the present study, SLTs mentioned the effects of different personalities on interprofessional relationships. According to them, the types of ambience were based on the types of people they were dealing with. The SLTs were exposed to challenging environments because of the multi-disciplinary nature of their work, with individuals from diverse backgrounds requiring the qualities of open-mindedness, very good listening skills and patience. The impact this factor could have ranged from professional knowledge, experience and authority to the power to dismiss or retain people on wards. For effective communication, it is thus imperative for SLTs to understand others' backgrounds. Such shared experiences can further facilitate mutual understanding (Clark, 1993).

Some quotes concern the personalities of various professionals and how these affect interprofessional team working. Rogers (1959) postulates the theory of therapy, personality and interpersonal relationships, as developed in a client-centred framework primarily concerned with personalities, behaviours, relationships and person-centred care. This theory postulates a correlation between personalities and behaviours. Environments and personalities affect each other, which then shapes attitudes. Various personalities within the team have both positive and negative effects on interprofessional team working. In line with this, the SLTs thought that some were

easier to work with than others, and indeed preferred working and co-operating with those with whom they shared personal as well as professional relationships, despite the potential attendant difficulties.

Some personalities have a negative effect on interprofessional working, as is evident from the tone of emails, and a sense of passive aggression that prevailed in the paralinguistic mannerisms shown by some co-workers. The participants used phrases including "tricky personality issues", "those kinds of people" and "those are individual personalities." According to Hall (2009), health care professionals' various values, cultures, customs and behaviours affect their interprofessional relationships. Factors such as professional culture coexist with issues relating to historical legacies, social class and gender. Educational and training factors for each professional provide him or her with a professional identity and values that can prove a barrier to interprofessional working. A study by Scott Reeves 2010 explores the role of ethics in collaborative practices. In some ways, it is possible that ethical issues can be addressed through practices, including the creation of a culture that provides for considerations of ethical reflexivity. The use of self-surveillance in practitioners' professional culture sometimes caused misunderstandings and problems for interprofessional working in order to achieve professionalism and involve users in promoting collaboration. The answer to Research Question 2 will be discussed in the next section, which concerns the experiences of SLTs in IPE.

8.11 Participants' views of IPE

This section addresses the second research question, regarding the experience of SLTs in IPE. The aim of this question is to obtain an in-depth understanding of IPE and of its impact on IPCP. IPCP confers several benefits, as observed by McGrath (1991). According to this study, SLTs were able to develop a basic overview of the process. There was an evident diversity in their individual perceptions concerning IPE. They developed an understanding of the input and significance of the roles of other professionals and collaborators, with a focus on teamwork. IPCP researchers have frequently focused on teams in acute care and medical and health care teams such as

surgical teams (Kitto et al., 2013), as opposed to groups such as SLTs. This section will focus on understanding IPE before discussing its benefits, the learning that was assimilated, and attitudes to IPE.

8.11.1 An understanding of IPE

During the study, the majority of participants spoke about their understanding of IPE. These subthemes will focus on the various perceptions with regards to what IPE means to the participants, such as their understanding of other professionals, explaining their roles to others, holistic perspectives, and appreciating a variety of views and perspectives. They will concentrate on this study's findings regarding how IPE is understood in the context of the current literature. Research was conducted on students of the Nuffield Foundation, which explored the knowledge and skill levels of SLT professionals working with children during their early years of practice. Working and training together helped them gain extensive knowledge and improve their capabilities, as found in the research (Hall, 2005). Understanding the roles of other professionals provided the SLT students with a holistic perspective. Some SLTs were also of the view that IPE workshops at universities worked in that context but not subsequently, because real life is so very different.

8.11.2 Promoting the SLTs' role

The SLTs felt that IPE was aimed at reducing team conflict when it came to working within groups. In addition, they said that interprofessional environments gave them an opportunity to promote their jobs. A lack of understanding regarding the roles of SLTs among patients is one issue, but when this information is also found lacking in other practitioners potentially serving the same patients, the problems tend to be accentuated. It becomes a struggle for new practitioners to cope in such conditions, and raising awareness of their roles through IPE consequently becomes critical.

8.11.3 Understanding patient values

Some participants stated that IPE gave them a better understanding of patient values. Health care organizations using patient-centric teamwork practices have flattened their

organisational structures. Such organizations have health care settings that can facilitate the IPE practice of learning and serving. These organizations always seek team-based collaboration when providing health care, and the positive impact of IPE on teams is quite evident (Anderson, Gray and Price, 2017). Through these responses, the SLTs presented a basic overview of the following:

- IPE gave them insight into how to make others understand what their job description or role entails, thus clarifying the function of SLT as well as SLTs' contribution to the field
- The IPE process proved to be enjoyable while also helping to provide a solid understanding of what is meant by IPE
- IPE provided them with a clearer idea of teamwork, as it was aimed at reducing the team conflict that arose as a result of working in groups
- IPE enabled them to maintain professional dialogues by ensuring they learned the necessary skills to adapt to and blend in with the others
- By contrast, some SLTs had negative views of IPE and did not find it useful in light of existing barriers with other professionals.

Thus, one unifying theme to emerge from the data was that current and future SLT roles have a crucial part to play in developing an IPE-based understanding of improved patient care. The SLTs often drew attention to the lack of clarity regarding IPE and their subsequent understanding of IPE's significance. This confusion can be exacerbated with the emergence of SLTs along with their subsequent dialogues in clinical settings with professionals from different clinical professions, including physiotherapy, paramedics, dietetics and radiography. The perception of the majority of SLTs was that focusing only on skills could limit the potential of SLT roles and lead to more entrenched professional groups. Analogously, the need for skills reflected the "reality" of the ever-evolving demands of practicing at an advanced level, with some holding that provisions for the current role struggled to keep pace with such demands.

This necessitates the development of pre-registration education as an important step for IPCP**.** Lumague et al. (2006) conducted a study whose results show that collaboration affected the students' skills, behaviours and attitudes. Zwarenstein and Reeves (2000) conducted a Cochrane review to determine "the efficacy of IPE interventions as compared to education in which the same professions were learning separately from one another." The researchers proposed that mixed-method studies could provide some clarity for IPE, which in turn affects both practice and patient care. Meanwhile, Zwarenstein and Reeves (2000) advocate studies in IPE generally focusing on the working of different group and multi-disciplinary teams. In total, the present research findings and theories of IPE make it apparent that IPE helps improve team collaboration and communication skills. Knowing more about each other's roles provides great opportunities for SLTs to explain their jobs to other professionals, confounding the myth of SLTs as restricted and ignorant professionals.

8.11.4 Benefits of IPE

According to the data produced by the present research, the SLTs benefited from IPE by learning how to work with different professionals. The results also reveal that the main area for SLTs to focus on is working together with other professionals. They also learned the art of team building and the ability to explain their function. IPE thus created a bridge between diverse professionals and facilitated an understanding of various approaches and perspectives. McCartney (1999) suggests that, between such radically different systems, it is surprising that effective collaboration occurs as often as it does, stressing the need for IPE. Most importantly, the SLTs learned much regarding others' thought processes and functions. For example, the majority of respondents viewed medical problems from a psychological and physical perspective.

It can therefore be concluded that the respondents saw IPE as preparing them to work in teams whose professionals come from a variety of backgrounds. The most positive effect of IPE is that it increases the power of communication while fostering team spirit. According to the data, IPE helps SLTs understand how to promote their own field, whilst enabling cross-professional promotion across other fields.

As such, most of the SLTs felt very lucky in that they could communicate with each other so easily. The data also shows that the most important requirement is to understand their professional role and input, especially clarifying their focus when dealing with patients or service users. The idea is to develop and gain inclusion in key strategic multi-agency planning groups and to acquire the requisite high-level negotiation skills while developing an in-depth knowledge of the functioning of various agencies and building the skills necessary to actively influence senior decision makers at a strategic level across agencies. As such, the findings were positive as regards the recommendations to sustain and incorporate IPE within the curriculum. It is imperative for future studies to continue exploring IPE and its subsequent links to the improvement of patient safety outcomes. The findings show that IPE results in an improvement in the attitudes and values held regarding other professionals' roles. It also increases the knowledge of health care teams concerning the means of bringing about positive change in terms of patient safety and outcomes. IPE can, in fact, contribute towards the creation of a safer health care system and a systematic way of integrating safety into the process of care (Donaldson, 2008).

8.11.5 The limitations of IPE

There are three research findings in this respect. Firstly, the lack of communication and information in relation to professional communications emerged as one of the major IPE deficits. It was felt that those who were aiming for a good common motive lacked proper communication and that their motives somehow overlapped. This aspect was underlined by the fact that the SLT group showed minimal involvement in case discussions.

The second, contrasting finding was that medical and pharmaceutical students received more attention. Correspondingly, the SLTs felt that speech therapists were denied due recognition. Their minority status presented SLTs with challenging situations, while the pharmacists and medical students would not be willing to work with them. Despite positive experiences of IPE, several SLTs reported little acknowledgment by other professionals and painted a negative picture of them.

The third finding was the SLTs' perception that IPE did not provide enough practical skills. Interactions with medical students and pharmacists also made the SLTs uncomfortable owing to their personalities and how they communicated as a group. Thus, based on the SLTs' responses and the findings, it is evident that interventional planning for children and adults with speech, language, communication or eating and drinking needs should consist of partnerships with other agencies. Correspondingly, excellent communication and negotiation skills should be developed by all SLTs as part of their portfolio of leadership competence.

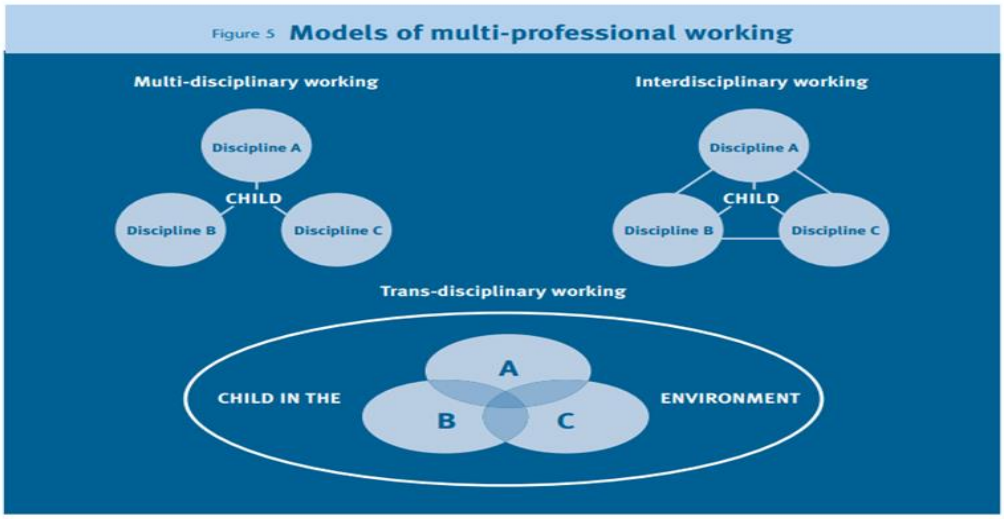


Figure 8.2: A model of multi-professional working *(Source: D'Eon, 2005:7)*

In Figure 8.2 D'Eon (2005) maintains that IPE and PBL learning situations promote effective teamwork through real-life contexts. D'Eon also notes that progressively augmenting the complexity of practice cases enhances the students' ability to transfer learning into real-life circumstances. Such an approach necessitates an extended implementation of IPE as opposed to a "one-off" session or an optional extra. Analogously, as regards IPE, Barr et al. (2013) recommends that interprofessional initiatives should be tested "against other theories, which may confirm or conflict" (p.7). Hean et al. (2013) and Hammick et al. (2007) stress the importance of theory and

pedagogy to IPE's evidence base. Irrespective of the approach to skill mix and sharing of competence, SLTs' key role as trainers and educators must not be ignored. Lindsay and Dockrell (2011) note that collaboration requires shared responsibility and understanding along with limited authoritativeness.

However, the term "collaborative model" fails to capture the key principles of transferring skills and competencies to others, particularly within a multidisciplinary team in order to support children more effectively. Byrne and Pettigrew (2010) highlight that the biggest barrier to collaboration in health care is a lack of awareness of each other's roles. Resource-saving strategies are also rife with regards to service models, and involve such activities as the delegation of tasks and programmes to others. The SLTs pointed to IPE's limitations regarding issues related to communication in the health care sector. The following section will discuss what SLTs have learned from IPE.

8.11.6 What SLTs have learned from IPE

The most important skills learnt by SLTs from IPE are those that involve working with a range of professionals in an interprofessional team. This could be helpful in circumstances where their contribution is not recognised in a way that it should have been. This education also helped them provide others with a chance to understand their job descriptions, roles and functions, as well as the contributions they could make. Understandably, therefore, Craddock et al. (2013) state that IPE must be mandatory in the prequalification phase of the curriculum. The response to this research question helped the researcher interpret the SLTs understanding of IPE and how it prepares them for IPCP.

SLTs mostly see IPE as leading to relatively important outcomes for their practice. Many of the SLTs went on to realize the importance of IPE at the point of registration as practitioners. Placement-based IPE activities at pre-registration level could be helpful for SLTs in determining the relevance of IPE for their work in terms of what IPE could teach them about other people's roles in a health care setting and an understanding of the broad framework that exists within an organization. During the learning process it is not just the involvement of other practitioners that is important, but also that of patients

and their families. It is only in the early days of learning that the SLT realises the extent to which the role of others is neither properly understood nor valued. This was before undertaking IPE training, which predisposed them to accept a collaborative environment, enabling them to embrace learning about others and understanding their connections within the patient-care system. While they were at university, IPE workshops did not seem to be relevant to their course; they seemed like an unnecessary diversion for them. However, when SLTs embarked on their careers, they realised the importance of the lessons.

The research shows that SLTs had a basic overview of the process and various perceptions regarding what IPE meant to them. The key points were,

- IPE made them more knowledgeable and they were able to appreciate how to work in multi-function teams involving psychiatrists, psychotherapists or even dieticians, thus introducing them to a broader framework of professionals.
- They enjoyed themselves while obtaining an understanding of IPE's concept. After initial inhibition, they showed great enthusiasm regarding the opportunity to clearly explain their job and its value as regards the status quo. Various studies have investigated the effects of IPE alongside the use of simulation in health education, particularly with regards to the SLTs' role (Scherer et al, 2013).

The beneficial impact of these teaching strategies has justified their continued use in order to enhance imperative parameters such as critical thinking, psychomotor skills and communication. This study's qualitative findings clearly indicate that learning profession roles were better understood by the SLTs as a result of their IPE experience, as corroborated by Gallagher et al. (2010), who conducted an interdisciplinary study involving volunteer students from medical, nursing and pharmacy programs. The researchers studied the effect of an improved understanding of the strengths and skills of other members within the health care team. The SLTs learned much about how others think and act. This was probably one of its most useful outcomes. They mentioned that they remembered being in a group with social workers at university and that they quite

enjoyed it, but did not really understand what the others did until they were involved in cross-functional case studies. The research shows that they all had to investigate the case studies from their own perspectives and appreciate the difference between them.

The findings clearly indicate the development of IPE and simulation as regards the importance of collaborative practice, with the aim of reducing the rate of practice errors and bringing about an improvement in the quality of care and patient outcomes. Some of the systematic reviews found that IPE works best when it is authentic and relevant to the student's role.

IPE gives considerable leverage to the argument for interprofessional teams being progressively involved in simulation, which remains a growing trend in health care education (Willhaus, 2012). In order to have a positive effect on patient care, these programs embraced joint efforts made by a range of medically related disciplines including pharmacy, nutrition, physical therapy and social work. It can thus be safely inferred that IPE offers a viable avenue for evolving attitudes amongst health care professionals, aimed at the enhancement of patient-centred care (Rodehorst, Wilhelm and Jensen, 2005; Rose et al., 2009).

Correspondingly, there is a growing acceptance by health care educators of the utility of IPE and simulation in academic settings. This use of simulation within IPE is seen to be an effective teaching strategy in the first years of education, particularly in health care (Baker et al., 2008; Dillon, Noble and Kaplan, 2009). In line with the findings of this study, Giardino and Sigler (1994) posit that IPE helps medical students work collaboratively with other professionals in inter-agency collaborative practice. Mirroring the findings of Lumague et al. (2006), the SLTs in this study pointed out that all participants acknowledged the significance of interprofessional teamwork oriented towards patient care while stressing the need for further education on the functional roles of other medical professionals. The SLTs also stated that IPE indicated how they could team up with other professionals who were not best placed to understand the various aspects of SLTs' functions. The SLTs also felt that IPE was aimed at reducing conflict within teams. Some professionals felt their contribution was more important at

certain times, but they were not recognised in the way they should have been. The SLTs felt that IPE provided them the chance to make others understand what their job descriptions and roles were. The practice started from considerations of what to explain concerning the way in which they operated, how to explain it, and how provide an understanding of what their contribution was in the field. IPE was also the reason the SLTs learned the art of adapting to and blending in with others. Some SLTs were initially apprehensive about IPE and doubted its potential benefits, but they began to enjoy their roles when the activities became engaging. The theory of IPE and IPL (IPL), along with the model of IPE, is thus imperative. Petri (2010) observes that

> *An interpersonal process is characterized by health care professionals from multiple disciplines with shared objectives, decision-making, responsibility, and power work together to solve patient care problems. The process is best attained through an inter-professional education that promotes an atmosphere of mutual trust and respect, effective and open communication, and awareness and acceptance of the roles, skills, and responsibilities of the participating disciplines*.

By contrast, the theory behind IPCP is too complicated to explore, since it encompasses so many professional fields and inter-professional backgrounds.

8.11.7 IPE as preparation for working practice

The key expectations of IPE by the SLTs focused on the specialist medical professions and their purposes, which helped bridge the gap between SLTs' knowledge levels and those of other medical students. This provided SLTs with knowledge of how to collaborate with professionals in the future, while the IPE events offered detailed insights regarding the individual aims of other professionals with a view to improving teamwork across the disciplines.

Overall, IPE and training must first take place to ensure that all team members understand each other's responsibilities, roles and domains. Connolly et al. (2010) support the provision of detailed insights, emphasising the importance of case studies.

They state that SLTs are able to appreciate the diverse case management of each professional, thus providing them with ample scope to obtain a better understanding of what they are expected to face in the future. It is interesting to note that few SLTs differed from the majority opinion on any benefits of IPE, while agreeing that IPE also exposed them to audio-visual classes and provided them with the chance to interact with service users who shared their stories. The activities were more about understanding the exact role of the speech therapists, and were not restricted to what is generally taught in class.

The sessions also strongly emphasised the contribution made by the case studies and how every professional used cases differently, reflecting the approach of the various professionals. Practitioners differed considerably from one another, and this provided much scope for the SLTs to obtain a better understanding of what they would face in the future. The SLTs added that their interaction was also dependent on whether other professionals were interested in communicating with them and understanding their contributions in the field. Some of the SLTs held the view that the activities did not help much because they were about collaborating with different professionals. However, in the current context they are also given audio-visual classes and the chance to interact with service users who share their stories. Thus a potentially negative opinion became more positive, and confidence was boosted by IPE.

This finding is echoed by Sinclair and Ferguson (2009). In their study of nurses, concerns were expressed about over-anxiety as regards the clinical practice application of their learning. Although there was a reported improvement in efficacy with particular reference to skills in post-simulation experience, the findings reveal the universal ambiguity, lack of understanding and availability of variable role scopes and definitions with regard to SLT. That this can be addressed using IPE is commonly understood by the respondents. This is demonstrated by the present findings, which reveal increased confidence among the SLTs with IPE. This is reflected by van Schaik et al's (2011) survey oriented towards a simulation-based inter-professional team-training program that entailed interviewing health professionals with open-ended questions. The themes emerging from the study show an increase in the understanding of professional roles,

the value of debriefing and the gaining of practical experience. At the same time, Schaik et al's (2011) study describes an increase in self-confidence, positive attitudes and a positive impact on self-efficacy. An understanding of professional roles and knowledge was strongly emphasized by the SLTs in the present study. In summary, the SLTs thought that IPE prepared them for IPCP. The following section will discuss service users' involvement in IPE.

8.11.8 Services user involvement in IPE

The SLTs stated that involving service users was also seen as having a positive effect in the context of IPE. They said that service users had a mostly friendly relationship with them and they were able to provide many useful insights that helped teachers and nurses interact freely with any children who need help, and any patients who required care. The SLTs had a reasonable amount of interaction with these service users. Some SLTs also had direct interaction with the parents of school children, which had an impact on their case studies. It is thus believed that the optimal utilisation of IPE with respect to service users will best meet the needs of children and adults alike with speech, language and communication needs.

In accordance with this, the concept of managing a child's speech, language, communication and eating and drinking goals as part of their daily routine, management that is therefore undertaken by those to whom this applies, should be seen as a positive option. This is exactly where IPE comes into play. Notably, this is not a dilution of a specialist resource (Fey, 1986), but the effective implementation of an IPE approach whereby individual children's requirements are optimally addressed. Analogously, Freeth and Nicol (1998) use Kolb's (1984) theory of experiential learning to enhance the clinical skills of final-year students as well as newly qualified nurses. Owen et al. (2014) identifies some limitations in existing IPE knowledge and publishes a list of collaborative care best practice models (CCBPMs) to address them. While the process of developing CCBPMs includes various steps, learning theory drives this approach. As yet no researchers have used such a model to develop an IPE program.

Overall, the experiences of SLTs in IPE have been discussed. The SLTs had positive experiences of IPE, and regarded it as preparing them for IPCP. Some thought that IPE was not representative of the real world of practice. The following section will focus on how the current research findings can be used to improve the education and practice of IPE.

8.12 Key research findings with the in the Canadian framework to meet the needs of interprofessional education and collaborative practice in SLT

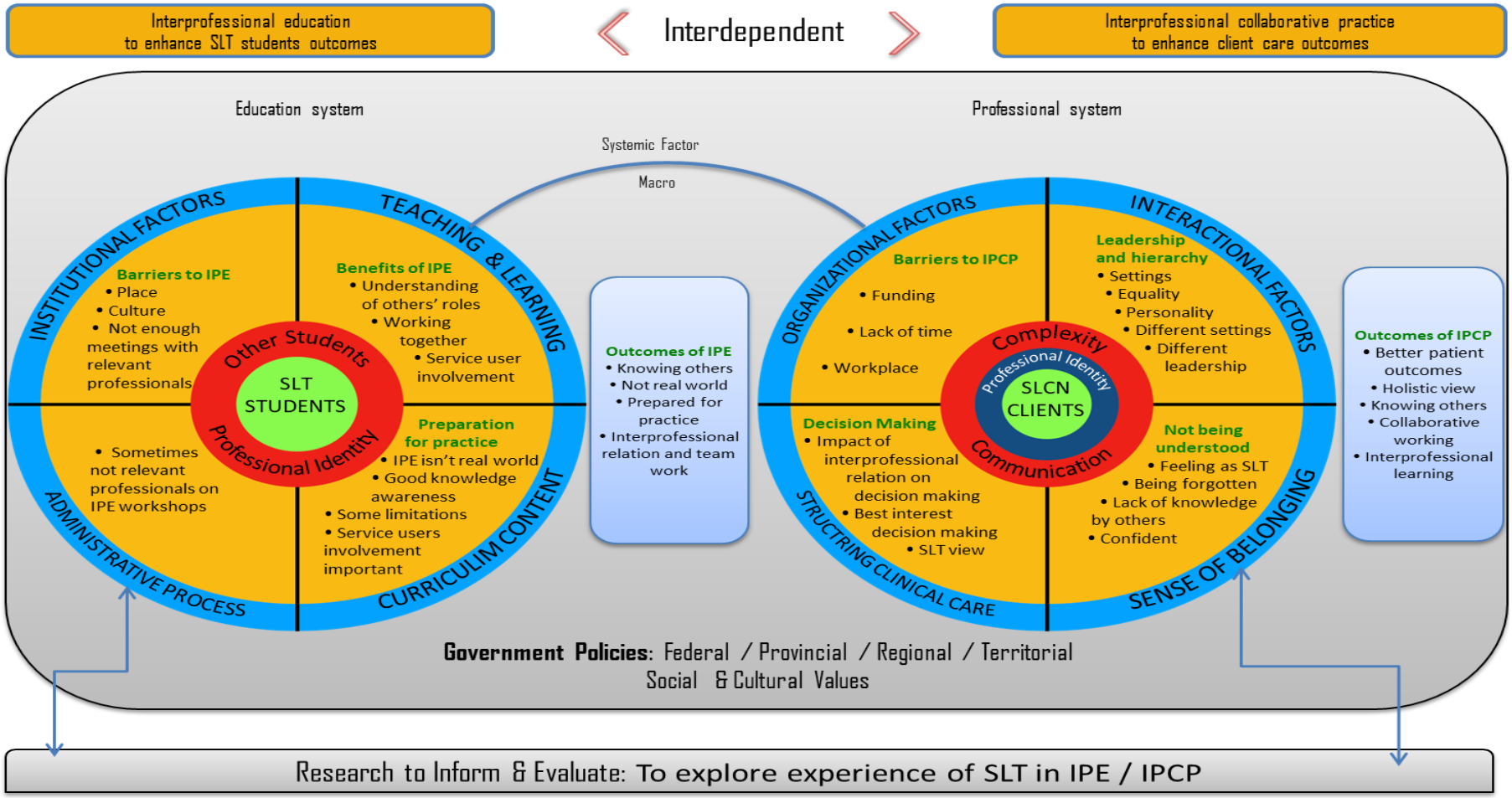
This section discusses the adaptation of Canadian model to accommodate the current research findings. This framework is called the Interprofessional Education for Collaborative Patient-centered Practice (IECPCP) model and is based on the research conducted for Health Canada. (Please appendix 12) The aim is to reorganize this model in accordance with the SLTs' education and practice.

> *This frame of reference can be seen as a first milestone in the development of an emerging area of inquiry linking interprofessional education with IPP.* (Oandasan, D'Amour and Zwarenstein et al., 2004:4).

It is a framework that shows the systems underpinning both the education and practice of interprofessional working. This IECPCP framework should help to present current research findings that influence educational programs to teach IPP as well as the determinants and processes that influence the adoption of IPP within the health system. As such, the IECPCP framework can be used to identify the processes and factors that can influence an educational program as well as to determine the adoption of IPE in the field of health care. It can also help explore the link between the two and facilitate an understanding of the cross-fertilization process between them.

Figure 8.3: Figure 8.1: Key elements of the findings adapted figure from D'amaour and Quandesen (2004)

Interprofessional education for interprofessional client centred collaborative practice in speech and language therapy: An evolving framework



8.13 IPE models for SLT

Pre-registration education is an important step for IPCP. In this study, SLTs spoke positively about IPE. The figure 8.1 shows the links between aspects of IPE. It comprises four circles. The central one represents SLT students, the right-hand one relates to other students and the professional identity of student SLTs in the interprofessional student group. The other circles show the themes and subthemes derived from this study, which also relate to D'amaour and Quandesens' (2004) models. It highlights the micro (teaching level), meso (institutional level) and macro (system level) factors. The learner is in the centre of the education circle; the second circle is affected by all the others and influences the abilities of health care professionals. Oandasan et al. (2014) assert that

> *Interprofessional education to enhance learner outcomes highlights the learners as central to interprofessional educational processes.*

The interface between the learner and the educator is an essential aspect of IPE. Within this framework, issues of socialisation are positioned as a key component that must be addressed in the development of IPE. Socialisation here means that the professional and cultural beliefs and attitudes that develop among health professionals can affect their willingness to collaborate with other health professionals (Perkins and Tryssenaar, 1994; Zungalo, 1994). Learners enter health professional programs with preformed stereotypical notions of their own and others' professional identities (Tunstall-Pedoe, Rink and Hilton, 2003).

Several studies have documented interprofessional education in health and medical courses. In this section, the focus is on the circle that relates to IPE in the context of SLT. The middle of the circle denotes SLT pre-registration students and learners. The second, around SLTs in line with the study's findings, relates to other students' attitudes and the professional identities of SLT students within their teams. As in the original model by D'amaour and Quandesen (2004), this circle concerns professional beliefs and attitudes. Lumague et al. (2006) sought to elicit students' perspectives on interprofessional experiences, benefits and challenges. The results show that

collaboration affected the students' skills, behaviours and attitudes. With the IPE workshops, SLTs learned to improve their collaborative work with other professionals. The present study suggests that there are a small number of IPE models for SLT courses. IPL can be delivered in a variety of ways, each offering its own learning and practical benefits. In the original model, the third circle mentions educators, who did not participate in this study. It is assumed that the educator's role in the Leicester model of IPE was more at a facilitator level. It is also more of a student-centred IPE model that reflects the findings of this study.

The present researcher has put related findings under the meso-level heading, and therefore within the third circle, under institutional factors. Interpretations of the present findings show that placement-based IPE would be vital in order for SLTs to understand how the practice of IPCP could work for them. The research reveals the barriers faced by SLTs, as shown in this study's findings under the teaching benefits of IPE, the faculty development preparation for the practice and the researcher's understanding of the administrative process.

The fourth circle of the new model is at the level of policy, and more generally covers the original figure's fourth circle. This circle was originally incorporated into the third circle. However in this current adaptation the researcher has assigned the general point to its own, fourth circle. All the findings (institutional and teaching and learning factors, curriculum content and administrative processes) related to this (meso) level are assigned to the third circle.

The final elements of the original framework, which relate to the study's findings, concern educational outcomes for learners and students. In this adapted model, the outcomes of IPE for SLTs are shown, together with themes from the study's findings. The major outcome that can be incorporated into the new model is that IPE prepares SLTs for IPCP. The outcomes of IPE were discussed earlier, while the researcher used the outcomes of the original models as a base for his themes. These outcomes include knowledge, skills, behaviours and attitudes. For knowledge, skills and behaviours, it can clearly be seen that SLTs have experienced both very positive changes and learning

outcomes from IPE, which has also positively affected their attitudes, while, most importantly, it was seen to prepare SLTs for IPCP.

8.14 IPCP model for SLT

SLTs frequently work with a range of professionals from various sectors. Sometimes, for example, an SLT will visit a school two days a week and work in community health services for the other two or three. SLTs generally lack a permanent place of work. This affects their team working and socialisation with other professionals. The following discusses the collaborative working models for SLTs, as adapted from Oandasan et al. (2004). Here again, the micro- (interactional), meso- (organisational) and macro- (systemic) level factors are highlighted. Patients and service users, including children with speech, communication, and language needs, can be seen at the centre of the collaborative practice circle. The second circle comprises professionals involved in the care of children and adults, which in turn affects the outcomes of SLCN care. In this circle, the process of interprofessional working seems to be clear. As such, the patient or service users are located at the centre. These circles are quite complicated, because human interactions between professionals with different world-views take place within a complex and changing environment. The fact that patients are at the centre means that their care outcomes are affected by those professionals. For an effective patient-centred model to exist, the patient's needs and wishes must be addressed. Oandasan et al. (2004 P15) state that

> *Research, including evaluation, informs both interprofessional education and collaborative patient-centred practice. It provides feedback that encompasses micro, meso and macro levels and helps stakeholders bring improvements to both the educational and practice environments.*

In this adaptation of the model, the researcher puts patients, clients, service users and students at the centre. This narrative clearly shows that SLTs use various terms for different clients because of their work settings. The second circle denotes professional identity, which emerged as an issue during the study. It is reflected by themes such as "How do you feel as an SLT?" and "How do other professionals see you in your role?"

Complexity of work was another circle that vitally shaped the practice of SLTs. The final circle regards the meso level, including organizational factors such as barriers to IPCP. Under interactional factors, the themes of leadership, decision-making and hierarchy can be seen. Decision-making is also placed under the structuring of clinical care.

A sense of belonging was one of the main themes mentioned by SLTs, with, once more, themes such as “not being understood”. Finally, the outcomes mentioned in the original figure can be directly adapted here to cater for the outcomes of SLT sessions, as experienced by clients, providers, organisations and systems. For effective SLCN care, professionals must accommodate the opinions of patients and parents along with their views on SLCN care. In SLCN practice, decision-making is influenced by the perspectives of children as well as their parents. This requires a practitioner to understand their specific roles in decision-making. It also depends upon the level of knowledge they have. This can be discovered through an active interaction between the practitioners on the one hand and the child or their parents on the other, such that the information received from an interaction can be assessed in order to understand their preferences. The level of involvement on the part of children and parents in this decision-making process must be decided before their views can be considered. This involvement can require a practitioner to take short-term steps and understand the nuanced targets for health care in collaboration with them. Children and their parents must also be informed of their level of involvement in the process, in order to bring about improvements in practice. Parental involvement to IPCP would be important issues that require further work in future research. In terms of patient involvement to IPCP, SLTs have outstanding opportunities to work with parents alongside other professionals. The present research findings are that working with parents and other professionals is important for SLTs’ interprofessional practice.

8.15 Summary of the chapter

The discussion clearly highlights how effectively collaborative practice contributes to the achievement of good practice and teamwork by SLTs. The diverse barriers, in addition to the facilitators of collaborative practice, have been identified in the chapter, together with a comprehensive analysis of the findings sourced from the respondent's comments obtained at interview. This study bridges the obvious gap in new research focusing typically on medical professionals with an emphasis on the significance of collaborative practice for allied health professionals. Relevant data was collected via responses obtained in semi-structured interviews, which were then analysed qualitatively using TA. This discussion indicates that the participants in this study regarded collaborative practice as significant for effective practice, particularly for delivering required interventions.

Typically, participants described their roles as providers and receivers of information relative to cases, albeit as providers of skills. This in turn betrays a lack of SLT inclusion in collaborative work. This lack of reciprocity may be an additional barrier to effective working relationships. Participants emphasised the need for better links between theory and practice in teaching collaborative practice, and were disappointed by the variable quality of opportunities to experience such collaboration. It was also felt that the value of collaborative practice could be enhanced by examining such opportunities in tandem with clinical skills. Engaging with other professionals through case-based clinical interventions could also ensure that all SLTs have equitable opportunities to experience as well as develop skills in collaborative practice. This study has also served as a preliminary that aims to enrich the understanding of newly qualified SLTs with regard to the current teaching of collaborative practice, demonstrating how learning opportunities could be enhanced.

CHAPTER 9: RECOMMENDATIONS AND CONCLUSION

This section presents the study's research findings in order to explore their transferability and applicability. It also includes specific generalisations regarding other samples and settings. It continues with a review of the theoretical framework selected and provides suggestions for future research in accordance with an evaluation of the research process. Finally, it presents a summary of potential enhancements to the philosophical framework, methodology and research outcomes, concluding with an overview of the chapter and final thoughts on the thesis.

9.1 Implementation of current research findings into pre-registration (IPE) and post registration (IPCP)

According to both the present research findings and the research's interpretation of the data, there will be some transferable data that can be used for future IPE and collaborative practice models for SLTs. In this chapter, the focus will be on that data and how it can be used. The SLTs' experiences regarding IPCP clearly show that IPE has been vital for them in terms of learning about IPCP. This section will focus on the implementation of IPE and IPCP specifically.

This research has produced four key findings. The first is that IPE provides SLTs with the opportunity to promote their jobs at the student level, notably by helping them provide more information about their professional role to other students. The findings clearly reveal SLTs' experiences of not being understood and of being forgotten in a professional capacity. The IPE curriculum might train SLTs and other students to better understand one another's roles and responsibilities. However, it still needs improvement.

The author suggests that SLT courses in the UK should use IPE as part of their SLT curricula, as presently required by the HCPC. How SLTs use the IPE curriculum was covered in the Discussion chapter. Some international capability frameworks are used by universities and instructors to develop IPE/IPCP training and courses. Current

research supports the Canadian capability framework as a good starting point for SLTs, with a view to focusing on and developing their curriculum with regards to IPE and IPCP. Ongoing research outcomes also appear to be compatible with that model.

The second finding indicates that IPE workshops must be more realistic because real-world settings are notably different from university environments. Most of the participants thought that the IPE environment at university level does not offer a realistic approach. Examples of inadequacies include not having the opportunity to work with a variety of professionals in practice. The researcher suggests that the IPE curriculum must include placement IPE workshops for SLTs. They would then have the opportunity to see various IPCP and interprofessional team working models, which would enable them to observe a variety of professionals operating at the clinical level. They might also have an opportunity to promote their jobs at that level. However, organizing workshops, which involved the different faculties in the universities even different universities in the region, was a challenging issue. Which was mentioned on the literature many times and we have discussed that under the organisational theories. The researcher suggests that universities and departments should have IPE management and facilitator teams, which could come together to organise and manage administrative parts of the IPE programmes.

Another point, which was mentioned by participant, is student need to be prepared for IPE so that they understand its relevance and debriefed afterwards so they can reflect on what they learned from it. Furthermore, IPE also needs to be fully embedded so that connections between IPE and the rest of the course are clear. The third significant research finding demonstrates that different personalities have a considerable effect on interprofessional relationships, whether positive or negative. According to the SLTs, it is sometimes quite hard to work with some personalities. For example, more challenging personalities might negatively affect interprofessional relationships, while other more congenial personalities could positively reinforce them. IPE sessions would have helped the SLTs to work within interprofessional teams. It might also have helped them improve their skills with regard to negotiation and decision-making within such a team.

The fourth key finding arising from this research concerns the settlement of disagreements and the complexity of the SLTs' work environments. The very nature of the work involved in SLT has its own problems. An SLT might be working in more than one sector and more than three workplaces. Some participants sometimes saw this as a cause of problems and disagreements. The IPE curriculum for SLTs must involve communication, diplomatic and conflict resolution skills and tactics workshops that could help them avoid and address issues around disagreements within interprofessional teams.

At this point the researcher provides some suggestions in line with the study's findings, and regarding specific areas of research. With regard to clarification, it is important to start some changes at pre-registration level. IPE activities at undergraduate level are important in terms of SLTs acquiring knowledge of other roles. In present research, SLTs mention the extent to which they have learned from other professionals' roles, responsibilities and knowledge of IPE team working. The researcher suggests that SLT courses could organise teambuilding and team working IPE events for SLTs to learn about these other roles. They could also organise IPE placement activities for SLTs in order to understand other professional roles in practice.

The other area where the Canadian framework proves compatible is interprofessional communication. Most of the SLTs mentioned communication as one of the key elements of an interprofessional relationship. SLT courses have specialist professional views on communication that could help institutions improve their relevant IPE workshops. That specialist communicative knowledge could also help SLTs manage their own interprofessional relationships better and it might help to other professionals to build up their skills. A further area where CHIC (2010) complements current data is that of patient/client or service user-centred practice. In the present research, the SLTs stated that clients were at the heart of their practice. IPE gave them a holistic view of their patients. Many of the SLTs also highlighted the positive impact of patient involvement in IPE workshops. The researcher suggests that SLT courses could organise IPE workshops with patient involvement. Placement

IPE workshops could also help SLTs understand parents and patient views in practice. Institutions must organise IPE workshops involving patients, with placement-based IPE activities for SLT students and patients.

One area in CHIC (2010) that has been mentioned is interprofessional conflict resolution, one of the main concerns of the SLT interviewees. They thought that, in order to avoid misunderstanding and disagreements, they needed to learn more diplomatic skills and conflict resolution tactics. The researcher suggests that SLT courses could organise some IPE workshops on conflict resolution and thereby avoid misunderstandings arising from interprofessional miscommunication. This would fundamentally help SLTs manage conflicts within and between their teams. The final domain where there is a fit with the framework is collaborative leadership. SLTs highlighted the importance of leadership, hierarchy and decision-making. The researcher suggests that SLT courses could organise some IPE workshops on the leadership and management of interprofessional teams within business and management faculties. Placement-based IPE could also help SLTs understand leadership within their own workplaces.

To summarise, the implementation of this study's findings could help institutions develop their own IPE curricula and IPCP standards. The researcher suggests that SLT institutions could use these findings alongside the CHIC (2010) capability framework to help them improve their IPE and IPCP events and provision. Having discussed potential ways in which current research findings could be implemented, the focus now shifts to the limitations of this research.

9.2 Limitations of the current research

Weaknesses are part of every scientific research method. According to Brikci (2007:2) the most common criticism of qualitative research is that the

> *Samples are small and not necessarily representative of the broader population, so it is difficult to know how far we can generalise the results. The findings*

sometimes lack rigour. It is difficult to tell how far the researchers own opinions bias the findings.

The primary weakness of qualitative research is the potential for researcher bias and prejudice that influence the study in favour of their own beliefs. An impartial analysis of complex data and issues thus poses a challenge for any qualitative research methodologies.

It is also true that transcribing complex data and deriving conclusions is highly challenging, since the understanding of the research question might differ between researchers. However, a decision to increase the sample size does not necessarily conform to the basic principles of qualitative research, since the results become characterized by group opinion more than those derived purely from studying transcribed data. Within the phenomenological research approach, the researcher also finds further limitations, including how articulate participants are, and misunderstandings around, and clarification of, terminology. There is also the issue of completing time-space specific statements by participants (Smith, 2003).

These limitations can be reflected upon during the research process. Some can be identified before the process begins, such as not stating what one wishes the participants to do in the interview beforehand, thus potentially affecting their group membership or role. Many of these, however, cannot be overcome in any research. Instead, it is for the researcher to be sensitive to certain factors and to reflect upon them during the entire process. As regards the limitations of this study specifically, these were found to be fourfold.

In the first instance, in order to involve a sufficient number of participants, the researcher interviewed individuals who had not graduated in the previous five years, and who were therefore eight or nine years removed from the early part of their IPE experience. As such, it was not known how accurate their memories would be. Secondly, as a speaker of English as a second language, the researcher found it hard to analyse the language of native speakers. It is also possible that certain subtleties in what

was said might not have been identified and analysed. As discussed earlier, in terms of unconscious bias, the researcher as an SLT with particular experience of working with children has tended to focus on this area specifically as opposed to potential SLT clients more generally. Finally, the researcher worked hard on the interviews, which remained quite structured, and used words such as "leader". This reflected his own expectations as opposed to more neutral questions. Overall however, the researcher has diligently tried to ensure the three key points of quality in qualitative research were taken into account, considering where and when they would have been relevant.

9.3 A critical evaluation of the research process

In this study, the interview data findings were examined and analysed using the development of themes and subthemes based upon the theories of reflexivity, quality, validity, reliability and trustworthiness, alongside a conscious review of researcher bias. The study also makes use of the qualitative data management software QSR NVivo10 to facilitate the management of interview data. A range of research techniques was thus employed to evaluate all the relevant aspects of the work.

9.4 Evaluation of the research philosophy

This research takes an interpretative epistemological position, with the researcher interpreting reality as communicated by participants in their own words. This method fits epistemologically into the interpretive paradigm. The researcher used a social constructionist approach, which explains that the human condition is difficult to measure. This means that there are no specific tools with which to measure its meaningfulness (Burr, 2002). Meaning and trust are considered socially constructed phenomena (Madill, Jordan and Shirley, 2000). The researcher also actively sought to be "reflexive", which entails reviewing aspects that may have influenced his impact on the gathering and interpretation of data. In this study, the interview data results were analysed using the development of themes and subthemes; hence, a thematic framework was applied. The findings were structured within a theoretical framework incorporating the thematic framework to demonstrate a unique interpretation of the data. A descriptive terminology was developed to indicate prevalence when discussing the data and

findings. Four main themes, as well as twelve subthemes, were derived from this data. The researcher discussed the theoretical background and relevant literature on IPCP, including research on teamwork, interprofessional teamwork, team roles, communication types, attitudes, hierarchies, cultures, professional identities, professional views, workplaces and pre-registration. The researcher subsequently reviewed educational, sociological, physiological and learning theories concerning IPCP, along with the relevance of these theories to SLT literature.

9.5 Evaluation of research methodology

The researcher used the theories of reflexivity, quality, validity, reliability and trustworthiness, together with a conscious review of researcher bias. He also used qualitative data management software, QSR NVivo10 to facilitate the management of the interview data. The methodological approach to this study is a qualitative one, which is described by Denzin and Lincoln (2011) as the method that involves an interpretation of the subject of the study. Additionally, it includes the phenomenological approach and methods. The aim is to describe the experiences in which people find themselves. Research methodologies were thus adequately employed so as to derive optimal results.

9.6 Reflections on design

The research design was aimed at identifying an exploratory research project with the object of addressing the research questions. The study design and methodology was congruent with the recruited sample size and the analysis of interview data. This duly produced answers to the research questions posed. With optimal results, the study illustrates the significance of an appropriate design and methodology selection in alignment with study needs, as opposed to preferences. The researcher has thus gained a comprehensive understanding of the methodological research options and the need for a discerning selection of these for this as well as future research projects. Specific attention was accorded to the research process owing to the interpretive nature of the study and the potential impact of this on subsequent findings.

9. 7 Reflections on sampling

The sample size was 21 SLTs, in line with the principles of interpretative phenomenological analysis. Ethical approval from DMU was a mandatory requirement in the sampling process. The challenge was to address the requirements so as to comply with the restrictions on contacting DMU SLTs who had graduated within the last five years. These individuals were chosen by the researcher because they had completed IPE courses together at DMU. This study also recruited participants from a diverse range of sources. The researcher was therefore able to approximate the schedule for such processes during the early research preparation stages. The graduates of DMU pre-registration degrees, BSc Human Communication (Speech and Language Therapy), from the last five years, were contacted using email addresses supplied upon graduation to the SLT division and DMU Alumni. 125 SLT students had graduated within the last five years, of whom 21 agreed to participate. Also, for future studies, the researcher proposes considering the factors of study duration, available transcription, data management and analysis resources.

9.8 Reflections on interviewing

To obtain the best results using interview methodology, the interviewer should respect the participants and enable them to demonstrate their experience in a safe and calm place (Tracy, 2010). The researcher must also encourage participants to talk openly and frankly. On occasion the interview schedule provided a useful framework for managing interview complexity (Smith et al., 2010). These strategies were tested during the pilot phase of the research, presenting an opportunity to examine research questions and practice researcher interview techniques in an IPA framework. Successful interviewing is predicated on the development of rapport between researcher and respondent. This requires building a relationship of trust and making participants feel at ease. The drafting of an interview schedule enabled the researcher to prepare for the encounter and set a loose agenda to guide the interview. Open-ended questions related to research questions and topics, were prepared before the interview (Cohen et al., 2007). Each interview was recorded, transcribed and coded.

In addition the researcher took notes by hand. Transcription proved to be a valuable part of the data management process, occurring immediately after the completion of each interview.

9.9 Critical evaluation of the analysis process and method used

The analysis process entailed the recording, transcribing and coding of each interview. The study involved interpreting, engaging with and individually exploring transcriptions as a way of making a link between a dataset and all the data collated. Subjective interpretation thus underpinned the entire analysis process. The researcher made notes to record his thoughts and decisions during the interview process, although the challenges in recording reasoning and abstract ideas in an accurate manner are limited to evidencing the "cognitive work" involved in the analysis. The researcher thus used notes, although in future he would use a format that could constitute a part of the publication to improve the documentation of the analysis process. This would be aligned to address the qualitative research's quality, coherence and transparency (Yardley, 2000). The nature of qualitative research is closely related to the research process and participants. This means that it is difficult not to inject personal bias. The researcher attempted to minimise this by randomly selecting semi-structured interviews. The research allowed the researcher to develop a competency regarding data-oriented analysis, building a thorough understanding of the data concerned.

9.10 Use of QSR NVivo10

The use of QSR NVivo 10 enhanced the study's handling of raw data. The researcher decided to use this software because of its suitability for the management of this type of research data. This was why NVivo 10 software was used to plan and document the analysis process. The researcher engaged with the data repeatedly to develop coding that resulted from reflection and analysis of thought processes and ideas regularly recorded in the research journal. This data was transferred to NVivo 10 on a Mac, enabling the tagging and coding of similar passages with regards to meaning and context. This particular research analysis could not be done with a broad-brush technique due to a variety of emerging themes and the need for great attention to detail.

This stage of analysis is absolutely necessary according to Gilbert (2002), because it broadens analytical perspectives. SR NVivo 10 proved to be appropriate for this particular research. The researcher was also able to facilitate the identification of the most appropriate functions for analysis. However, some of the software's functions were not applicable and failed to contribute to a better understanding of the data. In these cases, other methods were used where appropriate.

9.11 General reflexivity

Reflexivity is essential to demonstrate the phenomenological influence of analysis, particularly in qualitative research that utilizes a phenomenological approach. Reflexivity requires the researcher to acknowledge and reflect upon his own influence and prevent data manipulation as a result of bias. Although it is challenging to adopt this concept, the researcher's reflections on data analysis and the influence of his reflective approach are critical to such analysis (Gearing, 2004). This research provided the researcher with the necessary skills to reflect on his assumptions.

9.12 Usefulness of the research

The study introduces the key policies and principles underlining the SLTs' their interaction with other professionals. The introductory section positioned the research findings and outcomes in the context of key documents and policy influences. Critical findings of this study showed that the IPE curriculum could and would train SLTs to work better in interprofessional teams. Courses and universities should use this curriculum to train their students in order to improve their confidence and to teach them about interprofessional working and how to communicate with other professionals. Some of the highlights include IPCP, and IPE also proved quite important within the literature relating to SLT and IPE. Examples include how a person's character can affect an interprofessional relationship, with workplaces and settings also affecting collaborative practice. The research findings, in alignment with their applicability to analogous service providers, will be of practical use to practitioners and could potentially affect policy and practice, while also stimulating discussion and further inquiry (Yardley, 2000). The research was pursuant to interviews with SLTs and their

recording, dissemination and interpretation in order to achieve research objectives. By using reflexive practice, the researcher developed findings to project the reality of SLTs' experiences in various contexts.

These research outcomes will aid in the development of a theoretical framework, as generated from the detailed accounts given by the SLTs about their practical use, for practitioners and other parties. As examined earlier in the Discussion chapter, the research findings fit perfectly with at least one international capability framework that has helped institutions develop their own IPE/IPCP programmes. This research may also interest policymakers in the fields of education and SLT by studying the roles of those providing care and delivering the SLT skills necessary to improve client welfare and communication. The study provides a theoretical framework that offers deeper insight into the SLTs IPE and IPCP experiences, including their roles and understandings. The findings reflect an interpretation of the reality of SLT experiences, as well as demonstrating areas of good practice along with training needs. The ultimate outcome of this research should be focused on developing skills for collaborative working and improving knowledge as well as understanding regarding the deployment and value of SLTs. This would in turn contribute to improvements in opportunities for professional development, which would then lead to better outcomes for children. These are issues that remain high on the political agenda for health care and education provision. They can remain the subject of attention by disseminating the findings and encouraging future research to bridge the gap between research and the realities of day-to-day practice.

9.13 Concluding remarks

The key findings of this research suggest that it is often challenging for SLTs to be recognised by other professionals. To that end, IPE becomes essential for them because it gives them some useful opportunities to promote their role and dispel misconceptions surrounding it. Equally, the personalities of professionals can have a significant impact, whether positive or negative, on interprofessional communication. The intervention of some challenging professionals can stymie and even jeopardise such communication.

By using adequate conflict resolution techniques, SLTs can manage conflicts within their teams with considerable efficiency. Importantly, IPE is not a real-world simulation. This is because there are not enough opportunities to work collaboratively in real-life experience. With that said, the following recommendations have been made for consideration.

9.13.1 For SLT pre-registration education (IPE)

- IPE is useful for SLTs, as it prepares them for IPCP. SLT courses can then be used to train other students.
- At a clinical level, many professionals do not know their roles and responsibilities. Against this backdrop, IPE enables SLTs to promote themselves as professionals from the point at which they first become students, in terms of helping them to express themselves better and perform well as professionals.
- IPE helps SLTs to learn a greater range of diplomatic skills and resolve misunderstandings in interprofessional team working.
- IPE workshops must be more realistic, since there are not enough opportunities to work with different professionals at the clinical level.
- IPE workshops should be more realistic in the light of needs including that of providing placement-based IPE.
- International capability frameworks should be used as a baseline for curriculum and activity organization for IPE/IPCP in SLT. The Canadian capability framework was especially suitable for SLT courses in the UK in order to develop their curricula.
- Activity-based and patient involvement workshops tend to be more effective. SLTs courses could consider integrating this into their curricula.
- Video-based interprofessional case discussion was found to be useful and relatively realistic. Moreover, SLTs saw this approach in a positive light. Therefore, SLT courses could include more video-based work as a means of incorporating interprofessional perspectives within the curriculum.
- Service user involvement in IPE was mentioned. Most of the participants' institutions should use service user involvement within IPE for SLT courses.

9.13.2 For SLT Post registration (IPCP)

Interprofessional collaboration provides the best outcomes for patients by giving a holistic view of SLTs. An interprofessional team is patient-centred, facilitates patient information sharing, yields a positive impact on patient outcomes, and empowers professionals to share their knowledge/skills within an interprofessional team. Two primary outcomes emerged in this context: SLT professionals learn from their interactions, and patients find a voice to express their viewpoints through the coordinated effort of interprofessional teams. SLTs thus need more interprofessional input in the workplace to improve their patient outcomes. Essential communication skills for IPCP include adaptability, understanding others, excellent listening skills and flexibility and friendliness, along with a strong desire to serve patients. The SLTs conformed to these requirements in many ways. It has been established that leadership and hierarchy issues affect the functioning of SLTs' interprofessional teams as regards client needs, work settings and environments, organisational structures and mono-professional practices, and in other ways. Organisational and system level issues should therefore be actively addressed by policymakers and professional bodies. This suggests that more research and work must be carried out by institutions to provide evidence for changes to policy. Decision-making entails various dimensions and is essentially patient-centric. Keeping that in mind, interprofessional decision-making could be encouraged symbiotically across the system and at various organisational levels. It was also observed that the main barriers to interprofessional working include time constraints, workplace challenges and differences in professional culture. These problems must be resolved at both systemic and organisational levels.

9.14 Recommendations for future research

According to the study’s findings, the SLT domain would benefit from further research in the areas of theory for improving teamwork and communicative approaches, with specific reference to collaborative practice and IPE. The most striking theme to emerge from this study included the great number of areas where SLTs communicate and collaborate with other professionals in a range of environments. In light of the existing literature and the present study’s findings, further research is needed in these areas if

there is to be any hope of bridging the obvious gap. The recommendations and outcomes of the current study are optimally positioned to provide a common structure for future studies, not least because of its specific focus on SLTs "attitudes and practitioners" collaboration. The study offers original theoretical constructs in the methodology section, which then presents optimal applicability to similar research topics focusing on professional groups and settings. With regard to future research, three other suggestions are proposed below.

9.14.1 Research suggestion 1: Other professionals' experiences of SLTs in IPE and IPCP

This specific area necessitates a need for management and human resource input regarding the value of interprofessional collaboration and communication. Furthermore, the concept of multi-agency collaboration benefitting from different leaders and individuals in different contexts where SLTs are used is not insignificant. This research revealed that communication and collaboration are determined by individual decisions and attitudes as opposed to professional appreciation and expectations of job roles, as exhibited by qualification and expertise. The current research design limited the observation of how practitioners determine the SLTs' effectiveness and his or her impact in determining whether or not particular SLTs were worth acknowledging as partners in the provision of speech therapy. The study data and findings from the analysis also underpin the lack of a standardised approach to interprofessional relationships and collaboration between the professionals concerned.

9.14.2 Research Suggestion 2: Effects of personalities on interprofessional relationship and practice

This theme also deserves merit as a research suggestion**.** The current study revealed a lack of professional identity for SLTs in the medical field among the majority of professionals, especially doctors. 20 of the 21 participants related that they interacted and worked with other professionals from various fields, including mental health nurses, learning disability nurses and physical health doctors, psychiatrists, psychologists, occupational therapists, physiologists, dieticians and pharmacists. Respondents also spoke of the impact of individual attitudes on the part of these professionals and the

effect this had upon their performance and communication. The study identified several attitudes held by various team members over issues such as being assertive and advocating on behalf of the patient and not leaving all decisions to the consultant, and whether these were important, or indeed acceptable. However, the study is limited in exploring the actual mechanisms needed to present the effect of personalities on IPCP. As a result, mechanisms such as documenting opinions and timely escalation have not been explored in much detail.

9.15 Summary of the chapter

The chapter focused on the development of a theoretical approach to study the phenomenon of SLT deployment and colleague rejection or appreciation of their role. It showed how reflective research could contribute to replicable research approaches accurately and objectively investigating a particular phenomenon. The main focus has been on the findings regarding the need to examine the new knowledge garnered from the research results. There has been a clear focus on the need for interprofessional team working, collaboration, communication and interagency working. Conclusively, for successful and effective teamwork and collaboration, communication and working on a par with other professionals, this aids effective care provision and provides an acknowledgement of the worth of other professionals. This can only be good for SLTs and patients at both micro and macro levels. A study and adaptation of the findings for implementation in practice is therefore of paramount importance.

9.16 Final thoughts on the thesis

SLTs constitute a very small group of professionals who work within a diverse range of settings in the UK. This study has been one of the only ones to focus on their perspectives of IPE and IPCP. Its focus on health professionals, who have undergone IPE training at undergraduate level, following up on this at post-registration level, is also rare. This thesis has focused on the experiences of SLTs, specifically in IPE and IPCP. The researcher conducted 21 semi-structured interviews with SLTs who had graduated from DMU within the last five years. The reason the researcher focused on that specific range was because these SLTs will have undertaken IPE courses as undergraduates. The researcher wanted to discover how those IPE workshops shaped the SLTs IPP by investigating their subsequent experiences. The present research findings show that IPE prepares SLTs for IPCP. The importance of IPE was highlighted by the SLTs. Four key findings arise from this study, findings that are relatively new to the literature on SLTs and IPE. These concern how personality is affected by IPE and IPCP, the effect on the professional identity of the SLT, the complexity of the SLTs' work, and the importance of communication within IPE and IPCP. Some of the study's findings fit well with various international capability frameworks, specifically the Canadian version. This should allow potential SLT course providers the opportunity to develop their own IPE and IPCP courses and training. One of the participants' main criticisms of IPE was that it does not reflect real life: SLTs found practice different from IPE. SLT courses should organise IPE placements for SLTs, which would present them with opportunities to improve their IPCP skills. Finally, it would stimulate the literature on IPE and IPCP to investigate perspectives regarding pre- registration and post registration.

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APPENDIXES

Appendix- 1 Literature searching strategies

Data bases	Key words	Sources
Cochrane library CINAHL Applied Social Sciences Index ASSIA Medline (PubMed) British Nursing Index(BNI) Sciences Direct Web for Knowledge CAIPE JIPHC IPEN	Interprofessional education Interprofessional working Interprofessional collaborative practice Team working SLT Multi-disciplinary Interdisciplinary Mixed method Phenomenology Interpretative phenomenological analysis Triangulation Sociologies Psychology Quantitative Qualitative	International Journal of Interprofessional education Evidences based IPE IPE Review WHO Report ASHA Report CAIPE Report International Journal of SLT BMC Public Health

Appendix- 2 Ethical approval

DE MONTFORT UNIVERSITY LEICESTER

HLS FREC Ref: 1364

22nd January 2015

Ali Yildirim
PhD Candidate

Dear Ali,

Re: Ethics application – The experiences of recently qualified speech and language therapists in interprofessional collaborative practice (ref: 1364)

I am writing regarding your application for ethical approval for a research project titled to the above project. This project has been reviewed in accordance with the Operational Procedures for De Montfort University Faculty of Health and Life Sciences Research Ethics Committee. These procedures are available from the Faculty Research and Commercial Office upon your request.

I am pleased to inform you that ethical approval has been granted by Chair's Action for your application. This will be reported at the next Faculty Research Committee, which is being held on 29th January 2015.

Should there be any amendments to the research methods or persons involved with this project you must notify the Chair of the Faculty Research Ethics Committee immediately in writing. Serious or adverse events related to the conduct of the study need to be reported immediately to your Supervisor and the Chair of this Committee.

The Faculty Research Ethics Committee should be notified by e-mail to hlsfro@dmu.ac.uk when your research project has been completed.

Yours sincerely,

Professor Martin Grootveld
Chair
Faculty Research Ethics Committee
Faculty of Health & Life Sciences
De Montfort University

Email: hlsfro@dmu.ac.uk
Web: http://www.dmu.ac.uk/research/ethics-and-governance/faculty-specific-procedures/health-and-life-sciences-ethics-procedures.aspx

Faculty of Health and Life Sciences, Edith Murphy House, The Gateway, Leicester LE1 9BH.
T: (0116) 255 1551 **F:** (0116) 257 7135

Appendix- 3 Research Protocol

Aims and Objectives	Aims: To explore the knowledge, experience and roles of recently qualified SLTs working in different interprofessional contexts in children's services. Objectives: To explore: -Participants' experiences and knowledge of IPCP -Participants' views of their pre-registration preparation for IPCP -The roles taken by participants in different interprofessional contexts -Their experiences of their relationships and communication with other team members
Background	IPE and IPCP quite important for the health and social care professional. However as a health care professional there is not enough research and literature about it. That's why we will try to find how is it work in SLT areas and what kind of effects do it have.
Methods	Methodology: Interpretative phenomenological analysis Data Collecting methods: Data will be collected using Semi structured interviews. Participants: SLTs who graduated from DMU in the last 5 years working in the UK.

	Pilot study: Finding some volunteers for the pilot study interviews them to develop the methods. Interview: Researcher will have face-to-face interview with participants.
Ethical issues	Ethical approval will be obtained from the DMU Faculty Ethics committee.
Resource	The possible cost of this project will be, -Travel expense -Stationery -Data inputs -Data Analysis program
Time scale	1. Step: April 2013 to July 2014: Research proposal and research setting and Ethical approval 2. Step: July 2014 to April 2015: Data collection 3. Step: April 2015 to April 2016: Data analysis and Writing UP
Dissemination/output	I will target the SLTs who are newly qualified I will try to disseminate this research to the SLT area for their education methods and practice methods. Possible Dissemination: -Some internal and external report may be publish -It will be present some international conference

	As a workshop or presentation. Possible Target audience: -Center of the advance interprofessional education -Royal college speech and language therapist -National Health Services

Appendix- 4 Participants email

Dear colleagues,

My name is Ali Yildirim and I am a PhD student at the De Montfort university SLT department. I hope you will consider taking part in my study. This will involve a single interview at a time and place, which suits you.

My research is into the IPP and experience of recently qualified (**the last five years)** SLTs. I am also interested in their views about their undergraduate interprofessional education. I hope you will be interested to take part in my study.

Please let me know if you need any further information.

If you are interested in taking part please contact me

P12049214@myemail.dmu.ac.uk or my supervisor Jenny Ford jsford@dmu.ac.uk .

I hope to hear from you.

Kind regards

Ali YILDIRIM

Appendix- 5 Participants consent from

CONSENT FORM

THE EXPERIENCES OF RECENTLY QUALIFIED SLTS IN INTERPROFESSIONAL COLLABORATIVE PRACTICE

Name of researcher: Ali YILDIRIM

Please initial all boxes if you agree

1. I confirm that I have read and understood the information sheet [18.05.2015 and Version number 1] for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason. ☐
3. I agree that non identifiable quotes may be published in articles or used in conference presentations. ☐
4. I agree to the interview being digitally audio recorded ☐
5. I understand that data collected during the study may be looked at by a supervisor from DMU. I give permission for the supervisor to have access to my data. ☐
6. I agree to take part in this study

_____	_____	_____
Print name of participant	Date	Signature
_____	_____	_____
Print name of person taking consent	Date	Signature

Consent form date of issue: 18.15.2015

Consent form version number:

Appendix- 6 Manager Information sheets

Information Sheet B

For Managers

THE EXPERIENCES OF RECENTLY QUALIFIED SLTS IN INTERPROFESSIONAL COLLABORATIVE PRACTICE

Name of Investigators: Ali YILDIRIM

I am Ali YILDIRIM a PhD student from health and life science faculty in DMU. I would like to invite a member of your staff to take part in my research study. We hope you will allow this member of staff to take part. This sheet contains some information about the study to help you decide. Ask us if there is anything that is not clear or if you would like more information.

Thank you for reading this.

What is this study about?

The aim of this study is to explore IPP for recently qualified SLTs by investigating their experience knowledge and roles. Another aim of this study to explore participants' attitudes towards pre-registration interprofessional education, which is relevant or valuable for their current interprofessional collaborative practice. By taking part, participants will help to understand IPE, team working and interprofessional collaborative practice in SLT.

Who has reviewed the study?

This study has been reviewed and approved by DMU, Faculty of Health and Life Sciences Research Ethics Committee.

What does the study involve?

The study involved semi-structured, face-to-face interview lasting one to two hours. Interviews will be audio recorded and transcript for analyses. These will be arranged to suit the participant.

How are participants selected?

The participant will be selected from the DMU SLT course database (Alumni). The letter and information will be sent to students who have completed the SLT program in the last five years at the DMU.

What are the possible benefits of taking part?

This research will help us to understand interprofessional collaborative practice from a SLT perspective. Taking part could contribute to your staff member's CPD.

Complaints process

If you have a complaint regarding anything to do with this study, you can initially approach the lead investigator. If this achieves no satisfactory outcome, you should then contact the Administrator for the Faculty Research Ethics Committee, Research & Commercial Office, Faculty of Health & Life Sciences, 1.25 Edith Murphy House, DMU, The Gateway, Leicester, LE1 9BH or hlsfro@dmu.ac.uk

Confidentiality and anonymity

This study will not ask specific questions about the service and workplace. The aim is to explore experiences in a general way. All information will be kept on a password-protected database and is strictly confidential.

The audio recording and transcript of interviews will be given an ID code to ensure anonymity. This data will only be seen by the researcher and supervisory team. Any

information included in these or future publications will be completely anonymous. All data will be destroyed within five years of completion of the research.

Who is organising and funding the research?

This research is thesis a PhD research project at DMU. It is funded by Ministry of Education and Higher Education Academy of Turkey for the student's professional development.

Contact for Further Information

If you would like any further information about the study or need to ask any questions please contact me:

Ali YILDIRIM

SLT Department

Health and Life Science Faculty

DMU

The Gateway

Leicester LE1 9BH

P12049214@myemail.dmu.ac.uk

07429910079

If you have any questions or concerns about this study, you should discuss them with the researcher leading the study. If you have any concerns about the way the study is being conducted, you are welcome to contact:

Jenny Ford

Principal Lecturer

SLT Division

Faculty of Health and Life Sciences

DMU

The Gateway

Leicester LE1 9BH

jsford@dmu.ac.uk

0116 257 7759

Thank you for taking the time to read this information sheet. We are very grateful for your participation in this study. You will be given a copy of this information sheet and a copy of the signed consent form to keep.

Appendix- 7 Participants information sheet

Information Sheet A

THE EXPERIENCES OF RECENTLY QUALIFIED SLTS IN INTERPROFESSIONAL COLLABORATIVE PRACTICE

Name of Investigators: Ali YILDIRIM

Invitation paragraph

I am Ali YILDIRIM a PhD student from health and life science faculty in DMU. I would like to invite you to take part in a research study. Before you decide whether to take part it is important for you to understand why the research is being done and what it will involve.

Please take time to read the following information carefully and discuss it with friends and relatives if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether you wish to take part or not. Thank you for reading this.

What is this study about?

The aim of this study is to explore IPP for recently qualified SLTs by investigating their experience knowledge and roles. The study will also explore participants' attitudes towards pre-registration interprofessional education, which is relevant or valuable for their current interprofessional collaborative practice. By taking part, participants will help to understand IPE, team working and interprofessional collaborative practice in SLT.

What does the study involve?

Participants will be asked to take part in one semi structured interview lasting one to two hours. Interviews will be audio recorded and transcribed for analysis.

Why have I been chosen?

You have been being chosen to participate because you are a speech and language therapist who qualified recently from DMU and are working as an SLT in the UK.

Do I have to take part?

No, the study is entirely voluntary. It is up to you to decide whether or not to take part. If you decide to take part, you will be given this information sheet to keep and will be asked to sign a consent form. If you decide to take part you are still free to withdraw at any time and without giving a reason.

I am interested in taking part, what do I do next?

I strongly recommend that you discuss this study with your manager and ask for your manager's permission. An information sheet for your manager is available on request. If you are willing to participate you can contact the researcher team by email or telephone.

What if I agree to take part and then change my mind?

You can withdraw from the study at any time, without giving a reason.

What are the possible disadvantages and risks of taking part?

You are being asked to give up some time in order to take part in this study. You are being asked to discuss your work; if you take part you should be careful not to mention names of organizations, colleagues, patients or places. If you mention any name by accident the researcher will delete it. You are strongly advised to inform your line manager before agreeing to take part.

What are the possible benefits of taking part?

This research will help us to understand interprofessional collaborative practice from a SLT perspective. Taking part could contribute to your CPD and there maybe future opportunities to write a paper with the researcher.

What if something goes wrong? / Whom can I complain to?

If you have a complaint regarding anything to do with this study, you can initially approach the lead investigator. If this achieves no satisfactory outcome, you should then contact the Administrator for the Faculty Research Ethics Committee, Research & Commercial Office, Faculty of Health & Life Sciences, 1.25 Edith Murphy House, DMU, The Gateway, Leicester, LE1 9BH or hlsfro@dmu.ac.uk

Will my taking part in this study be kept confidential?

All information, which is collected, about you during the course of the research will be kept on a password-protected database and is strictly confidential. The audio recording and transcript of your interview will be given an ID code, which will be used, instead of your name to identify your data. This data will only be seen by the researcher and supervisors team. If you accidentally give any identifiable information in the interview it will be deleted. Any information included in these or future publications will be completely anonymous. All data will be destroyed within five years of completion of the research.

What will happen to the results of the research study?

The results of the study will be published in a PhD thesis. The result of the research may also be presented to local health care providers, at conferences, and in peer reviewed journals. A paper summarising the results of the study can be provided for you if you wish. Please let the researcher know.

Who is organising and funding the research?

This research is thesis a PhD research project at DMU. It funded by Ministry of education and higher education academy of Turkey for the student's professional development.

Who has reviewed the study?

This study has been reviewed and approved by DMU, Faculty of Health and Life Sciences Research Ethics Committee.

Contact for Further Information

If you would like any further information about the study or need to ask any questions please contact, the researcher or supervisor:

Ali YILDIRIM

SLT Department

Health and Life Science Faculty

DMU

The Gateway

Leicester LE1 9BH

P12049214@myemail.dmu.ac.uk

07429910079

If you have any questions or concerns about this study, you should discuss them with the researcher leading the study. If you have any concerns about the way the study is being conducted, you are welcome to contact:

Jenny Ford

Principal Lecturer

SLT Division

Faculty of Health and Life Sciences

DMU

The Gateway

Leicester LE1 9BH

jsford@dmu.ac.uk

Thank you for taking the time to read this information sheet. We are very grateful for your participation in this study. You will be given a copy of this information sheet and a copy of the signed consent form to keep.

Appendix- 8 Pilot study interview topic guide framework

THE EXPERIENCES OF RECENTLY QUALIFIED SLTS IN INTERPROFESSIONAL COLLABORATIVE PRACTICE

INTERVIEW

CODE NUMBER

INTERVIEW CODE

DATE

HEALTH AND LIFE SCIENCE FACULTY

SLT DEPARTMENT

DE MONTFORT UNIVERSITY

GATEWAY / LEICESTER

LE1 9BH

Background information

Note: This page will removed from the questionnaire at the university to ensure confidentiality

Name:

Surname:

Work address:

Telephone:

Gender:

Age: Which age group are you in? Please tick the boxes

20-29	
30-39	
40-49	
50-60	
60+	

Introduction to the Interview

This section is an introduction section there is some bullets points about it

- The researcher Introduce himself to the participants
- The researcher check to person do they still happy to consent, do they have any questions
- Remind participants that they are being recorded – consent?
- Remind them about confidentiality – no names of organizations or people
- Participants don't have to answer any question if not comfortable to do so
- Explain what is going to happen
- Free flowing conversation
- Can move away from the question

  At the end of each section, make a global rating of the section (see rating scale in each section) based on the resident's responses using the following scale (this can be done after the interview on the basis of researcher notes)

  The order of the interview will be as follows;

Current job,

Previous job,

Pre-registration course,

Interprofessional working,

Team experience and roles,

Communication type,

Barriers and hierarchies

Attitudes

CURRENT (JOB)

When did you complete your course?

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What is your job title? (ft-pt)

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Where do you work? (NHS-Private)

……..

Which Client groups you work with?

……..

PREVIOUS JOB

Can briefly describe a typical day and week?

……..

What was your job title? (ft-pt)

……..

Where did you work? (NHS-Private)

……..

Which Client groups did you work with?

……..

PRE REGISTRATION COURSE

We have talked about your previous work experience, now we will focus on your pre-registration course

2) Was interprofessional education (IPE) part of your course?

3) Tell me briefly about it? What do you remember?

-Where did you do your IPE?

-What other students did you meet e.g. professions?

-What happened when you met?

-Did you meet with any service users?

4) What did IPE mean to you?

5) How did you feel about IPE?

6) Have you used any learning from IPE?

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INTERPROFESSIONAL WORKING

We have talked about your pre-registration course now we will focus on your interprofessional working experience

Tell me about your work with other professionals

Prompt questions:

Who do you work with? How does this work?

How do you communicate?

What is the purpose of the Interprofessional work?

How well does this work?

What sort of skills there is needed for interprofessional working?

Tell me (more) about interprofessional teams you work in

Prompt questions

1 What is your role in the interprofessional team?

3) How was this team organised? Where do you meet?

4) How does it work?

5) Do you think there is a leader in your team? Tell me about how this work (if yes who decided who will be leader and why?)

6) What happens when you meet with them?

7) What do you find useful?

8) Tell me about your professional identity in that team as a SLT? How do other people see you?

NOTES:…….....

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TEAM EXPERIENCE AND ROLES

I'd like to talk a bit more about the teams you mentioned.

1) Tell me about ……team?

2) What is the purpose of team?

3) How does the team communicate?

4) Tell me more about that?

5) Are there any patients and service users involved in your team?

6) How does the patient get involve with the team?

7) What do you think your team achieves?

8) How did you learn to take part in this team?

-What did you need to learn?

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COMMUNICATION TYPES, BARRIERS AND HIERARCHY

We've talked about the teams you work in, now can we discuss communication in these teams

1) What works well? Are there things that don't work so well?

2) Which type of communication do you prefer?

3) Do you have any regular meeting or face-to-face communication with the other team members?

4) How does leadership work? Tell me about the status of the different people in your team. How does your role fit in?

5) How do you feel when you communicate with them?

6) Do think are there any barriers to communicate with team?

7) Tell me about the skills you need for communication in this team? Can you expand on the skills that required communicating with other team members?

8) Is there anything you recognized from IPE at university?

What were the difficulties and barriers that you experienced when you were studying IPE at UNI.

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ATTITUDES

We've talked about communication in your teams. Tell me a bit more about how you feel about this. Give examples from the teams your work in

1) How are decisions reached in …… team?
2) How do you feel about this?
3) How do you resolve differences of opinion? How do you resolve conflicts in your team?
4) Tell me how you feel about working with the different professions in your teams?
5) How do you feel about the outcomes for the patient and service users?
6) How well do you feel IPE prepared you for IP practice?

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CONCLUSION

Is there any other point that you want to make?

Is there any question you want to go back to?

Thank the participants taking part in this study I can produce a copy of the findings if it is requested.

Appendix- 9 Main study interview topic guide

THE EXPERIENCES OF RECENTLY QUALIFIED SLTS IN INTERPROFESSIONAL COLLABORATIVE PRACTICE

INTERVIEW

CODE NUMBER

INTERVIEW CODE

DATE

HEALTH AND LIFE SCIENCE FACULTY

SLT DEPARTMENT

DE MONTFORT UNIVERSITY

GATEWAY / LEICESTER

LE1 9BH

Background information

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20-29	
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60+	

Introduction to the Interview

This section is an introduction section there is some bullets points about it

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- The researcher check to person do they still happy to consent, do they have any questions
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- Participants don't have to answer any question if not comfortable to do so
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- Free flowing conversation
- Can move away from the question
-

At the end of each section, make a global rating of the section (see rating scale in each section) based on the resident's responses using the following scale (this can be done after the interview on the basis of researcher notes)

The order of the interview will be as follows;

Current job,

Previous job,

Pre-registration course,

Interprofessional working,

Team experience and roles,

Communication type,

Barriers and hierarchies

Attitudes

CURRENT (JOB)

1) **Can you tell me about your Job?**

-Client groups

-Settings

-Type of your work

-Any other work

2) Can you explain a typical week?

3) What other professionals do you work with?

4) Are there any groups that you work with in the voluntary sector?

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PREVIOUS JOB

We have talked about your current work experience now we will focus on your previous job?

Can you tell me about your work setting in any SLT previous jobs?

Prompt questions

- Were they full time or part time?
- Which client group and settings?
- Tell me about any work with other professionals

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PRE REGISTRATION COURSE

We have talked about your previous work experience, now we will focus on your pre-registration course

1) When did you complete your course?

2) Was interprofessional education (IPE) part of your course?

3) Tell me briefly about it? What do you remember?

-Where did you do your IPE?

-What other students did you meet e.g. professions?

-What happened when you met?

-Did you meet with any service users?

4) What did IPE mean to you?

5) How did you feel about IPE?

6) Have you used any learning from IPE?

NOTES:…….....

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INTERPROFESSIONAL WORKING

We have talked about your pre-registration course now we will focus on your interprofessional working experience

Tell me about your work with other professionals

Prompt questions:

Who do you work with? How does this work?

How do you communicate?

What is the purpose of the Interprofessional work?

How well does this work?

What sort of skills there is needed for interprofessional working?

Tell me (more) about interprofessional teams you work in

Prompt questions

1What is your role in the interprofessional team?

3) How was this team organised? Where do you meet?

4) How does it work?

5) Do you think there is a leader in your team? Tell me about how this work (if yes who decided who will be leader and why?)

6) What happens when you meet with them?

7) What do you find useful?

8) Tell me about your professional identity in that team as a SLT? How do other people see you?

NOTES:…….....

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TEAM EXPERIENCE AND ROLES

I'd like to talk a bit more about the teams you mentioned.

1) Tell me about ……team?

2) What is the purpose of team?

3) How does the team communicate?

4) Tell me more about that?

5) Are there any patients and service users involved in your team?

6) How does the patient get involve with the team?

7) What do you think your team achieves?

8) How did you learn to take part in this team?

-What did you need to learn

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COMMUNICATION TYPES, BARRIERS AND HIERARCHY

We've talked about the teams you work in, now can we discuss communication in these teams

2) What works well? Are there things that don't work so well?

2) Which type of communication do you prefer?

3) Do you have any regular meeting or face-to-face communication with the other team members?

4) How does leadership work? Tell me about the status of the different people in your team. How does your role fit in?

5) How do you feel when you communicate with them?

6) Do think are there any barriers to communicate with team?

7) Tell me about the skills you need for communication in this team? Can you expand on the skills that required communicating with other team members?

NOTES:…….....

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ATTITUDES

We've talked about communication in your teams. Tell me a bit more about how you feel about this. Give examples from the teams your work in

7) How are decisions reached in …… team?
8) How do you feel about this?
9) How do you resolve differences of opinion? How do you resolve conflicts in your team?
10) Tell me how you feel about working with the different professions in your teams
11) How do you feel about the outcomes for the patient and service users?
12) How well do you feel IPE prepared you for IP practice?

NOTES:…….....

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CONCLUSION

Is there any other point that you want to make?

Is there any question you want to go back to?

Thank the participants taking part in this study I can produce a copy of the findings if it is requested.

Appendix- 10 Main study anonymised transcripts

Ali: This ones [inaudible 00:00:00] as well. Now we will focus on the current job and then the past previous job, the registration course, inter-profession working, team experience and roles, communication type barriers, [harriages] and entities and we will start with your current job. Can you tell me about your job?

Participant: So I work in the inpatient [inaudible 00:00:25] in large acute hospital. I work on neurology wards with people who've just had neurosurgery with communication and swallowing difficulties. We've done critical care, trauma wards and with people quite unwell really.

Ali: Yeah, you said your client group as well. What kind of settings are there?

Participant: So they're all in patients and acute.

Ali: Acute. Then any other work? Did you do about [inaudible 00:01:01]?

Participant: Before my job or?

Ali: Now.

Participant: Now, any other work-

Ali: Is it a full time job or?

Participant: yes, I work full time in NHS, and I also lecturing additionally to that.

Ali: All right. Can you explain a typical week of you?

Participant: A typical week?

Ali: Yeah.

Participant: Most of my days are quite similar and they involve seeing patients on the wards; the new referrals and reviews. Involved case discussions and MDT

meetings, ward rounds which is obviously part of a team and that's kind of it really.

Ali: It is good. What other professions do you work with?

Participant: So I work with doctors, neurologists, anesthetists. I work with obviously other speech therapist, I work with occupation therapists, physio therapists and dietitians, nurses and [crosstalk 00:02:21].

Ali: It's quite huge. Are there any groups that you work with in voluntary sector?

Participant: I work a lot with the NID association and with my [inaudible 00:02:28] they offer quite a lot of support. That's the main associations I work with.

Ali: Thank you, and now we will focus on the previous jobs, and can tell me about your work setting in SLT in previous jobs.

Participant: Previous jobs? I've always worked with [inaudible 00:02:47] but I've also done out patient work and community work as well. In the past I've worked in committee [inaudible 00:02:54]. I did outpatient [inaudible 00:02:57] work, that's been a large majority of my work. I'm working working with some people with dementia in the community as well.

Ali: Was that work full time or part time?

Participant: Full time job.

Ali: And you mentioned the client group as well, in settings is in NHS as well

Participant: It's obviously NHS. I've always worked in NHS.

Ali: Tell me about any work with other professionals in your previous job?

Participant: So previously I worked in [strok 00:03:31] teams with [inaudible 00:03:33] and physio [inaudible 00:03:34]. I've done sort of early spotted strok discharge, where you work with generic [inaudible 00:03:47] plans as well. They work as assistants essentially for OT's and physios and speech therapists.

Ali: Thank you very much, now we will focus onto the registration course, I think six or seven years ago. It's quite historical things. When did you complete the course?

Participant: In 2009.

Ali: I graduated in 2009 as well. Was inter-profession education part of your course?

Participant: Yes.

Ali: Well good. Tell me briefly about it. What do you remember? When you first think about [inaudible 00:04:32].

Participant: We would have inter-professional education days and there would be sort of l think one in every year of the course and so they had different themes, for example in our final year we did one of our education and that is with our predominantly teachers and we just discussed all the issues around inter-professional working in education. We also had one about health in the community. We worked in communities and communities we got to meet other professionals, like social workers and we actually went to visit a client we asked them questions and looked at things from different perspectives. I think there was a more general one as well in first year were you just got to do the team building tasks where we got more about roles. I think it kind of depended which group you're in, what professionals you met, we had OTP. In our group which was really interesting, nurses because they do nursing here at DMU so there's quite a lot of opportunities for [inaudible 00:05:42] in there.

Ali: What other students did you meet or EG professions, I think you said it [inaudible 00:05:49] what happens when you meet them? Did you fight or just sit?

Participant: No I think I remember them being quite positive experiences. I know with the ODP's I didn't really know about their role, so that was really interesting and just to find out a bit more about their roles. I think the other people we met found out a lot about our role and so that with the nurses maybe we felt that we

knew a little more about what [inaudible 00:06:19] but I think they learnt a lot about what we actually did [inaudible 00:06:24]. I think you just show things about placements and the practical things which we've all got in common with the different courses really.

Ali: I think you should answer this question as well, how did you feel about IP, is quite good for?

Participant: I think is good thing to develop your team working skills and that's really useful in any job. I think being aware of what other professionals do is important but I didn't really meet professionals I work with on a day to day in my IP, so I never come across ODP's [crosstalk 00:07:14] but I this generic skill is in teamwork are useful. It's good for interviewing as well; because they'll always ask you about team working when you interview for a job, so being able to draw on that experience I think is really useful.

Ali: Was there any medics in your IPE course?

Participant: I think maybe in the one with health in the community, I think there was but I remember we were ... for some reason there wasn't many people on it. There was some sort of logistical issues, so I remember my experience being quite different to some of my peers.

Ali: Now we will pass to the inter-profession working. How do you work and how does it work? Who do you work with and how does this work in this job?

Participant: So what professionals?

Ali: Yeah. So I work with ODP and the surgery, neurologists and nurses and how does this work?

Participant: Okay. For example if you just take a client, if I was working with a client on the ward, come in with neurological symptoms, I would do my examination and then I would discuss that with the neurologist and tell them I can see and this is the problem with [inaudible 00:08:50] and try to help them with the diagnosis before the patient has been diagnosed and that's kind of one of the things that

doctors really appreciate is our assessment [inaudible 00:09:02] for example. If say the patient gets diagnosed with motor neuron disease that usually have sudden communication problems. We can discuss things like tube feed and the dietitian would get involved and we would sit down chat with patient about swallowing problems. I would explain that [inaudible 00:09:21] the dietitian would explain the options of tube feeding and we'd work together with the patient [inaudible 00:09:31]. That's just one example of how we work together.

Ali: It's generally around the case and sometimes do you have any meetings for other professions about the case or about your client?

Participant: We have different days, on Wednesday we have a discussion where we discuss all clients with motor neuron disease with the problems and on a Monday we have a neurology MDT where we discuss patients with MS Parkinson disease [inaudible 00:10:06] other conditions and things arise that week. We have ward rounds on critical care once a week where we discuss patients who have been long two weeks and we discuss joint rehab goals. There are set times on different days where we do specifically work together for them. We'll meet Adhok to deal with problems and do things with the patient as well.

Ali: Thank you, what is the purpose of the inter-profession work, I think you have said it generally it's about your clients and you discuss something about your client. And what sort of skills there is needed for inter-professional working do you think in that kind of client meetings or other meetings?

Participant: I think communication skills are really important and sometimes it can be quite challenging if you've got conflicting views or if your professional opinion is one thing and somebody else has got a different opinion especially something like diagnosis; I think having some negotiation skills and complex resolutions is quite handy. But I think is that the communication is the main one, being able to engage people in things and trying to get people to work together. Yeah working as a team.

Ali: Yeah and what is your role in clients team as an SLT? Do you think is it quite a silent role in the team or do you think you just speak something about the client

or it’s just kind of equal situation in the team, what do you think about it? In perspective of your roles in the client meeting?

Participant: I think it depends on the individual character, sometimes you know the doctor doesn't always take the lead role because the doctor might not know much about that client for example, and I might know a lot about them I've been working with them for several months so I may take a lead in that discussion, but then on a different occasion the dietitian might know more about them and they would take more lead and other times we are more equal.

Ali: It’s quite depends on the client, you mean?

participant: I think it depends more on the client and the individual characters, you've got some team members who are much quieter, and they tend not contribute as much and you have to encourage them to contribute, and you could have one physiotherapist [inaudible 00:12:34] and then another day the physiotherapist will be different and they'll be much quieter and you've got to really kind of ask them questions to get them to contribute so I think it depends on the characteristics of the team member but also the individual case.

Ali: Do you think is there any leader in your team? I think you mentioned it's quite natural team and there’s some natural leaders in there? And is there any your meetings or your client meetings as well is there any leader for lead all discussions normally or formally?

Participant: I mean on the critical care ward we follow paper work so we have to discuss the set things. We have to discuss are the drugs being reviewed, and are they sleeping well, have they got their communication needs met. We follow strict things the doctor describes, so they are kind of lead, they'll ask the questions you know are they sleeping and the nurse with answer. Have they got communication needs, I will answer, so that one-

Ali: So some people ask some questions.

Participant: Yes and the consultant takes the lead role in that, but that's probably the most abnormal way of doing it and it's usually much more informal but I would say

on that ward run the doctor takes a lead role but on other ward rounds it's much more collaborative and much more informal.

Ali: And tell me about your profession identity in that teams in your client teams as an SRT. How do other people see you? Do you think [inaudible 00:14:20] for perspective doctors or for the perspective of nurses.

Participant: I think again it depends on the individual and how well they know you, and what you do and so, I think I have a different role in different sectors. When I work with people with motor neuron disease it's a palliative condition, I have quite a good relationship with the clients. I've known for a long time and people often ... My role is I run [inaudible 00:14:51] people often look at me as somebody who knows the client very well. I'm often asked other things, which aren't necessarily my role, such as how is your wife doing. [inaudible 00:15:07] client relationship you're called on for where as in maybe critical care people it's much more medical model so people want to know my assessment and they look at me to find out you know how are they doing with this [inaudible 00:15:23] and you know what's a plan with this and it's much more structured. I think there's still lots of issues about people understanding our role and it can be frustrating when people don't really understand what you can offer. Generally I think when you work in a team with people they do get to understand your role and they make [inaudible 00:15:45] referrals. So that's good.

Ali: Yeah, I'd like to talk a bit more about the teams you mentioned; The client teams or meeting says well what is the purpose of these teams you think? It's just I think you have three or four different model of teams you're work with, one it's about to client and make a kind of care plan for client and the other one is do you have any chance to discuss with your professions in your working place about your you know are the type of stuff? Do you have any kind of roles for example one day a softie just stand up and give some explanation about these works or ...

Participant: Not really. We do our talk training but it's not like this structured just sort of weekly thing and so mean in March nutrition and hydration week. so I did sections of the MDG. around they can drink sometimes maintain hydration just

our top training session and I'm not really aware of any other kind of things that go on it's not a lot of opportunity. Doctors have their education session but they need secondary, so there's not lot of month to spend on re-education in the workplace though again [inaudible 00 17:23].

Ali: Before team meetings, how does this team communicate with each other using e-mail or letters or just calling?

Participant: We kind of work in really close scenario, so we kind of see each other all the time and if there is a particular issue, email will be the most common form of communication. Bump into each other.

Ali: Are there any patients and service user involved in your team?

Participant: Generally patients are not the meetings themselves, and we do multidisciplinary consultations with the patient and the family and a rank specific issues where we discuss for example just church home, I had to meet with the patient in nurse when the joint discussion around that all. if with the patient and communication during functional activities are right to join kitchens session with outpatient therapist. So that's how we involve the clients they actually train themselves we don't got to mind.

Ali: Yes, I think you have answered the next question well, how does the patient getting involved in the team. What do you think your team achieves?

Participant: I think as a team the last patient our cameras so I think the patients needs and that most operative later back and I think it's about a patient experience reading it and I think things don't get messed. So when you're talking, you are discussing things you make sure that you cover all issues because sometimes if you look at things in society. Something's falling between, they may not necessarily speak for issues all names that issue but they are issues when you meet all together they've come to the front to all the patients problems. You could get ideas from other people

Ali: It's like a sharing responsibility do you think?

Participant: Yeah, sometimes people have different perspectives on it so I always find it very useful to ask native how patients are communicated functional because when you go meet them the communication like the quite different due to assessment what it's like when then tell them that they pay, or ordered food from the menu price it's message about what the functional activities alive. You've got a different perspective I think about perhaps...

Ali: How did you learn to take part in this team? By email I think you have said before?

Participant: Yeah the these teams have been established for a long time when I started my job, they seem to have the ball of these events and you just go

Ali: Alright and what did you need to learn about this team you think?

Participant: when I first...

Ali: yeah in your team?

Participant: I think I just learnt all the time more about people's roles. I don't think there's anything I need to learn before I started going to the meetings but I do feel like my knowledge of individual members was growing through going to MDT meetings.

Ali: Thank you. Now we will talk about communication type barriers and hierarchies. What works well, are there things that don't work so well in your teams?

Participant: Such things that don't work too well, sometimes people can how do I phrase it When people kind of encroach on other people's professional roles I know some of my colleagues find it quite frustrating if ...

Ali: someone attempting role that can

Participant: Actually this is the name of the vines and about nutrition the dietitian might get a little upset about that and again it depends on individual characters. I think

probably what doesn't work well when people are new into the team and they assume different roles and they don't really know how the team works well. So I think the lack of knowledge of other people's roles where your role in within the team we know that people role

Ali: Is there any red line to show you enough?

Participant: Well I think that this is exactly there is no red line and everybody's role they overlap and I think it's knowing the boundaries of where you can overlap and where you need to say speak my colleague and other people saying is if I'm trying to narrow knowing when those boundaries lie but this individual I think communication breaks down if you do all the staff yet professional

Ali: and which type of communication do you prefer with your teams? Email, a cell phone or calling or cup of tea?

Participant: we never have cup of Whenever I am I think face to face meetings on the ward are very useful and is a really busy hospital it tend to be quite quickly and we all work in the same places I've seen no travel requirements will mean anyway so that we can meet easily and that's a relief

Ali: Do you have any regular meeting for face to face communication and you answer this question as well I think with other team members. How does leadership work in all these teams? some of think you mentioned is inclined group meetings for example it's quite natural leaders in there but sometimes just change you mention it as well .Tell me about the setting of different people in your team all those who role fit in the status in the team. How does your role in that team see no difference lots of Medics in there, did you feel you know or can I say something good?

Participant: So for example on the network cable there is one consultant who leads the ward round and all the professionals are underneath and they respond to the questions he asks but it is by the time protect and I'll feel like I can express is up for you to do that actually the roles are not actually defined by profession so, I that ward for a long time I know I how ward round works away with a different

doctor cadres often I will take more lead deliberate with the doctor because I know how the ward round works, so doctor will look at me and say should I go to the questions and look to me the different things so I think sometimes experience of that fact and is more indicative of eligible more than your professional sort of status and I think when you've got respect from the team it doesn't really matter what professional status you're. If people know that you were different for a long time all you've got understand those clients they will look for your opinion and even if you're not a doctor.

Ali: All right. How do you feel when you communicate with a leader in the team? If somebody spot an eye in the team for example, how do you feel when you communicate with that kind of people?

Participant: So sometimes people can be quite dismissive of the speech therapists role and so they will think isn't important to the client and that was not necessary and that can be quite challenging but I always try to be quite assertive because if I feel it is in the best interests of the patient I see that as a priority. If for example of the ward around and I think this patient needs to have a small assessment but facts that they say no they find they no problems I'll question that and I will challenge that ask why they think that's the case and but generally I think if it's in the best interest of the patient I will challenge. If something no sort of crimes to contest today so some issue a bit dismissive but you know I will just ignore it. Some people some doctors unfortunately don't think we've got a some consultancy they don't think we got role if the patient is unwell they don't things like communication needs are important but I know that a lot of doctors do think our role is important and I also think my own is important. I will sort of argue that trying to give evidence for why our roles are important and try express but it is important that we can both share

Ali: Thank you. Do you think are there any barriers to communicate with the team?

Participant: I think ... barriers to communication, I think it is hard when people don't understand your role. So they may think you have got to row because they don't understand what you can do so as an example people often don't understand much about AC, and the communication devices like brain for the patient and I

think that the communication is going to be actually when I been assessed and also the different devices they then realize and then the initial news the doctor they then appreciate our role a bit more than, so it is just a case of going to do it that all the time people get know you role more but sometimes that quite challenging because in the NHS. And quite a high turnover staff that ever seen in your kind of educating people about your role they then move on faster than you had of back to square things.

Ali: you need to explain something, sure yeah tell me about your skills you need for communication in the teams?

Participant: Okay communication skills...

Ali: Of course you're a human communication scientist.

Participant: I think and the service generally our talkative and I think the skills of communication I think you just got to be listening to professional not just being talked to and expressing your opinion about the good being a good listener as we hoped and is preferred working as team and I think that's how you gain mutual respect and asking people for their opinions, respecting their opinion, referring all acknowledging everybody has got role in the team and I think that's what you need to [inaudible 00:29:41].

Ali: All right, and can you expand on the skill sets required communicate with the other team members. I think you answered the question if you need to add something you can...

Participant: I think I've kind of answered, but just listening, being able to communicate.

Ali: Understanding roles, each other. Is there anything you recognize from IPE at University?

Participant: IPE...

Ali: IPE at University about communication skills with other people and students and you can break it to the practice sector.

Participant: Yes I mean in IPE, you often have to explain was a speech therapist did. I think most people I work with know what a speech therapist, [inaudible 00:30:35] do that as directly, but I think indirectly sometimes you do have to tell people a bit about your role and what you can offer as a speech therapist I think that kind of ability to express what your professional identity is, is important in the work place and general skills working as a team, communicating, listening, working together, those are the skills which you are identified in IP from the first year, are always important when working in a team.

Ali: Yeah. What were difficulties and barriers that you experience when you were studying IP at the university? It's quite kind of so amazing.

Participant: What difficulties ... I mean, it is difficult to remember...

Ali: For example IPE in education with the teachers? What kind of difficulties did you feel as far as you can remember?

Participant: As far as I can remember .Those in teaching or in the teacher IPA it's quite educational every time as and you quite explain the roles and responsible that can be collaborated in...

Participant: I always remember of being really positive and other as far as I can remember ... professional's were always interested in what we did and I always felt it was quite enjoyable to help people in what we did and I never had an active experience that they were quite dismissive, they'd have respect any lack of respect for our professional role's also from the best of my memory, I'd remember there being a big barrier took me ahead you could argue to the fact that they didn't maybe know our role straight way to the barriers often we didn't know the roles of other people. So that's part of the experience, so I did find that particularly manageable barrier.

Ali: Now we will focus on to the Attitudes s and how are decision reached in the initial stage?

Participant: How are decisions... ?

Ali: yes

Participant: It's kind of depends on the decision I think most of the decisions involve exaction pace, if it is the discussion is about what kind of diagnoses they may have, the doctor will make final decision they check all the team members they've, they make their decision's of the same as the other personal diagnoses. I think for the big decisions the doctors are often the main post for example, when you're assessing whether the patient have mental past or the ability to retain information, to express themselves but the doctor is the legal decision maker and they'll make the decisions about the patient in question and decisions about discharge, the doctor will have to find what goes on and off basically that would never be without discussing with social worker or the whole team and generally I think there's always a discussion they expect the doctor but the last year is essentially for the majority think the decision they can make that this is.

Ali: How do you feel about this? For example the doctor says something that you make a decision or something about your clients or?

Participant: I'm totally I think that's inappropriate. Because they are the profession who can appreciate and all the different components of the patient's care and obviously not seeking out our views before they make that a decision that can be quite frustrating. I think I'm fortunate that I'm working with a team that people don't go round making decision without consulting the team. People consult the team first.

Ali: Okay. The question is how do you feel about this about the doctor?

Participant: I feel happy about this and I'm confident that the decisions are the right patient and I don't feel so reckless.

Ali: how do preserve conflicts in your team if there any?

Participant: I think what we discuss and double sometimes without may need no medication and the doctor may want to go home and the actually .Generally when she

expressed your contract argument then your quite flexible. I have come across a situation where there's been a completely difference of opinion. Company

Ali: How do you resolve conflicts in your team if there any, is there any conflicts?

Participant: I mean I think any conflicts are quite minor and sometime gives advises and some conflicts we to just discuss openly.

Ali: Quite frankly

Participant: I think so you know it is an environment where the town discuss things openly and we do kind of hard while I think the option to discuss it with the team member's gives you access. It's a environment

Ali: Alright and tell me how you feel about working with different professions.

Participant: I think it is appositive thing, I really enjoy and I think it benefits patients massively. I think people should do more about where we are now we do a lot of red with previously may have been a match I can receive from the patients and for your general education and development.

Ali: How do you feel about outcomes for the patient and the service user it's to collaborative

Participant: It all come to patient is probably not a lot of research but certainly from seeing patients from patient feedback I always got reports feedback about the way we work as a team. So I think got to do with outcome patients.

Ali: How do you feel IPE appropriate use for that profession practice you think?

Participant: I think it probably it did to an extend; meeting new people and been in a sort of and skills like generalizing team working and being competence my role and explaining my professional role to other people mainly preparing mainly for

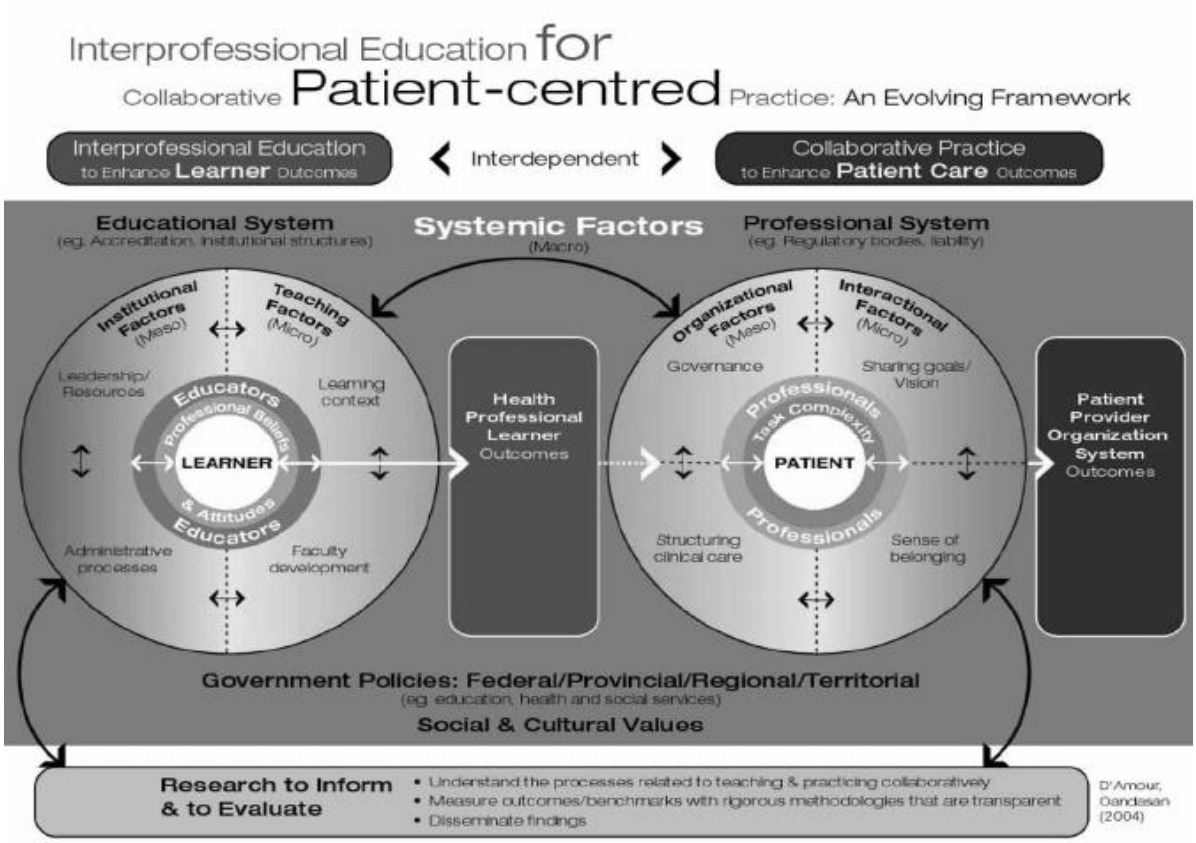
Ali: Do you think it was useful for you to your current job?

Participant: I think it was probably it was useful I think I mean you always I mean I did quite a lot of work- voluntary work before I completed university so I had worked on stroke ward/ association I quite met a lot [inaudible: 00:39:19] But never when I was interested in it so I did feel like I have the opportunity to work in team to gather around patient things but it was good to do that when I was student because you've shared experiences right placements and we got a chance and things like that. So I think it was a positive experience I think some people will be coming into the course may be as certain careers and have a clear sense they might know a lot about in professional working so I think different people will benefit from it more than others but like I said I find it repulsive experience.

Ali: And is there any point that you want to say something you have any questions about to hold research?

Participant: No

Appendix 11: Interprofessional education for collobrative patient centered practice: An Evolving Framework



Appendix 12: An example of analysed transcript

assistants, and parents. I have very little access to-- because I work privately as well, there's very little-- there's very little [NDP?] work going on. So out of all professionals, I think the only other professional I've worked with is educational psychologists. And that's it. Yeah.	- Teacher - Assistant teacher - Educational Psychologist (Private Sector)	
Okay. And how does this work, and how do you communicate with them?		Time (Fit sample
So, because I'm in schools-- I'm in schools every day in the week, so I have a school a day in the week. So I'm in the school [?] of the week, so communicating with the [inaudible] is quite good because I'm in the school every week. So I can relate with them quite well. And liasing with parents is also okay. it depends whether the parents come in and see the [?] of whether they want to continue therapy at home. But of the professionals it's usually only when I have a tax meeting, or a DACP meeting. Those are the only two times when I get to actually work with other professionals at the moment.	- Being in the school everyday quite good (Meeting each other)	workplace Social interaction
Yeah. What is the purpose of the inter-professional do you have in the school?		
[inaudible].		
Do you think it's--? What is the purpose of inter-professional work do you have in the school? You know, your work with the teachers. And do you have any regular meetings or that kind of stuff?		
So, how I work is, because a lot of my course have huge case loads of children, I usually assess and then I have teaching assistants carrying out the actual interventions on a daily or weekly basis, and then I review. So my role is more to train up teachers and teaching assistants, so that they can carry out the intervention. It works really well	Children services Teaching teacher and assistance	Work place

like that.		
Yeah, all right. And what sort of skills do you need for inter-professional work, do you think?	→ skills for IPW	
So, understanding each other's roles. Good communication. Understanding other view points. Being flexible. So being able to adapt to someone else's way of working, so that's officially important for that school and teachers, because schools have their own ways of working. I think those are the main ones.	- understanding roles - good communication - other perspectives - being flexible - Adapt to others work way ↳ schools working ways	communication skills Type
Okay. And what is your role in the inter-profession team - your role do you think?		
So, if I'm looking at it as my role in schools, I think my role is to manage the speech and language therapy within the school. So provide support, provide training, provide observation assessment and then lead the TAs to carry out the interventions.	→ Role ↓ providing management of SLT in school	roles
Okay.		
And my role in their [DACP?] meetings is to provide the speech and language therapy perspectives to that child's holistic profile.	Role in team meetings → SLT perspective about child	roles
Yeah.		
Yeah.		
All right. And do you think there is a leader in your team?		
So which one are you thinking about?		
In [?], in school teams.		like chair.
So, in the school team, I guess the lead - the main person responsible for all of this - would be maybe the same [course?]. So we work quite-- all of us work at quite the same level, but we all have different roles in the team. So, the same [?] will be facilitated every day. My role will be to provide the actual intervention plan and assessment and the teacher and teaching assistant's role	→ Leader ≠ SENCO ↳ all have diff role	leadership styles or patterns

will be to carry out the recommendation. So at least I would say maybe they all have different roles to play in the child's--		
Okay, all right. What happens when you meet with the team? How do you feel?		
I guess it's quite difficult because, being a private therapist, I only really meet with teachers and teaching assistants on a regular basis, because I meet with them on weekly basis. That rapport's already there, so we're all quite comfortable with each other, whereas I partially don't get huge opportunities to work with other [?] professionals as such, so I guess it might be different there.		
All right. And what do you find useful when you meet with them?		
When I meet with who?		
With the other team members. What do you find useful?		
So, thinking about it in the school, sometimes them making sure that they understand what I'm trying to say. So understanding the child's difficulties, and how to support that. And so I guess that might be different level enough understanding. And with other professionals, just trying to jointly say something about the education from the colleagues that I work with here. Trying to think of doing [?], so that both aims are met in a small intervention kind of class.		
Yeah. Tell me about your professional identity in your school team as NSLT. How do other people see you do things?		
Can you repeat the question?		
All right. Tell me about your professional identity in your school team as NSLT. How do other people see you do		

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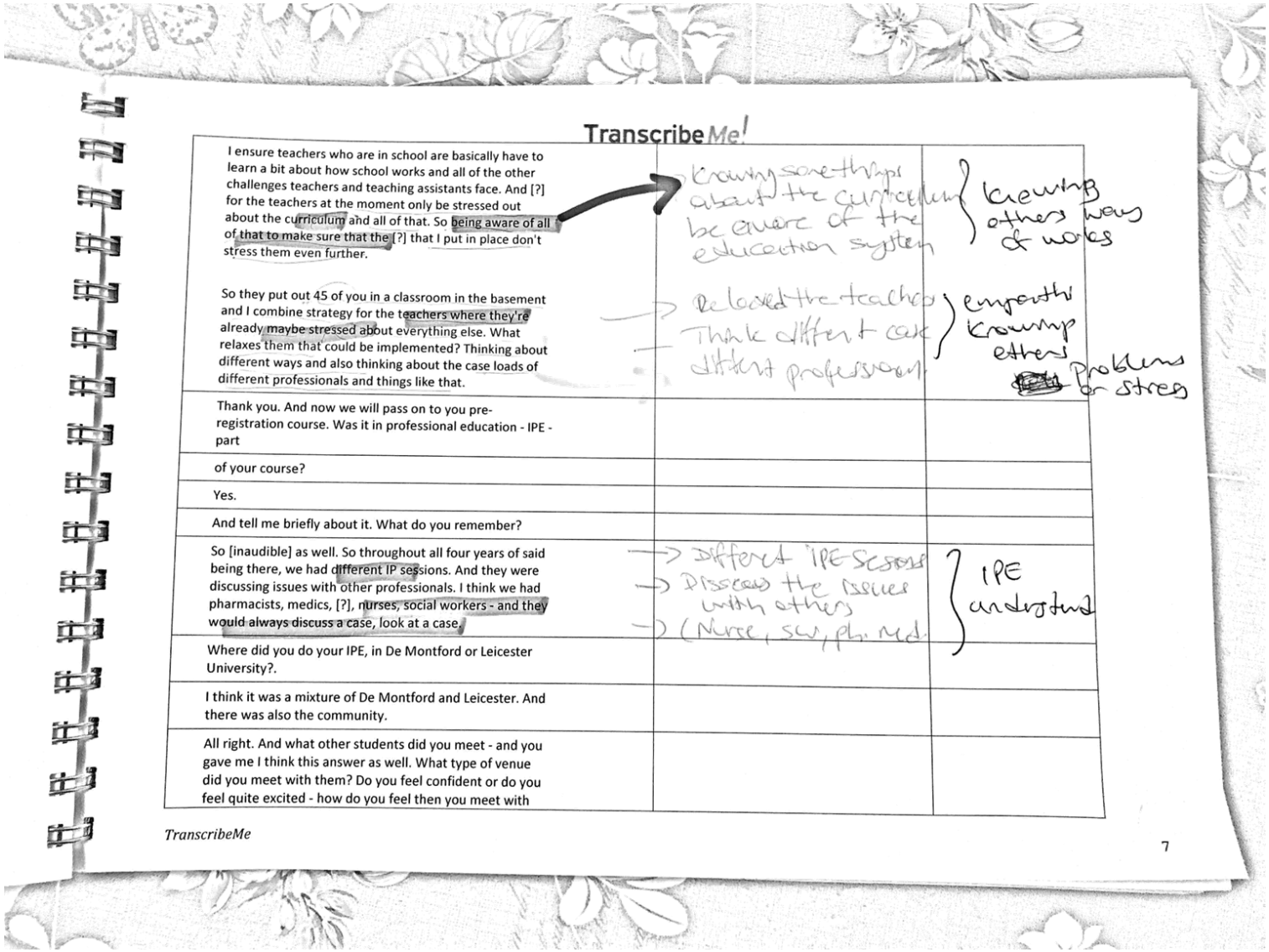
you think?		
As in how do they see me as a speech- and language [?]?		
Yeah.		
Okay. I usually muddle, so I usually [?], so they usually remember working with that. They usually see me [tidy up the therapy?], and then they are able to copy that later on. So-- is that [?]?	→ Hard working	} workplace wellbeing
Yeah, it's just your profession-like entity as an NSLT, and how do other people, other professions, like teachers, see you in that demand. You perfectly answered it, I think. It's good.		
Okay.		
And now we will focus on your team experience and roles. Tell me about your school team. How does this team communicate? Do you usually use email, or how do you communicate with each other?		
So for example, every day that I'm in the school, I always provide a school visit form to let the teacher know what I've actually done in that day. So that's outlining all of the things that I've done in that day. And then there's e-mails. And then with the teaching assistant, I usually e-mail over activities and games and things like that. But I also arrange one-to-one meetings just to make sure that they understand where I'm coming from and what that particular [inaudible] are. With Karen, it's either a phone call or e-mail, and then when I assess a child, I also invite them in to see the assessment so then I can get that. I can build that rapport with the parents, and also find out what their needs are, what they feel their child needs and all of that.	→ Team communicate with email → forms and reports	} Team Communication
And are there any patients or [?] or parents involved in your teams?	→ sometimes Parents Carer	} Patient involvement
So how it works is we'll attach [?] indivudually. So sometimes parents are quite willing to take an active role		

in the speech and language learning process. So they basically come in, I model the same activities to them that I model to the teaching assistant, and they do the same work at home as the teaching assistant does at school. And I then review the child's progress with the teaching assistant, but if there's any change then, I let the parent know, as well. So, for example, if a child's working on a particular speech sound, and they complete their targets for that sound, and a new sound is needed to practise on, then I'll email the parent also new activities and new pictures and new-- so they can carry on with the work at home. But it's very child-based. So it depends on that child, it depends on the people around that child.	→ showing same tasks to parents and teaching assistance values → Parents, SLT, teaching assists work together → Depends on the client. →	school team complex needs work together
All right. It's quite child-centered, you mean. Yeah.		
Yeah.		
All right. And what did you need to learn, do you think, for inter-professional working?		
What I needed to learn?		
Yeah, for working as an inter-professional working, you know.		
I think-- so right now I'm working with teachers, teaching assistants, and the parents.. So looking at that, it's how can I make my message acceptable to different kind of community. A lot of the parents that I work with are from very deprived backgrounds - low literacy skills and things like that - so how I can adapt my language, how I can adapt that activity so that the parents can carry out the same stuff at home. With teaching the teaching assistant, I-- the question was about how could I adapt, right?	→ making message to acceptable to different community → using language teaching SLT can with parents.	Communication Types and skills
Yeah, yeah. Yeah, what did you need to learn for adapting in your inter-professional teams? Yeah.		



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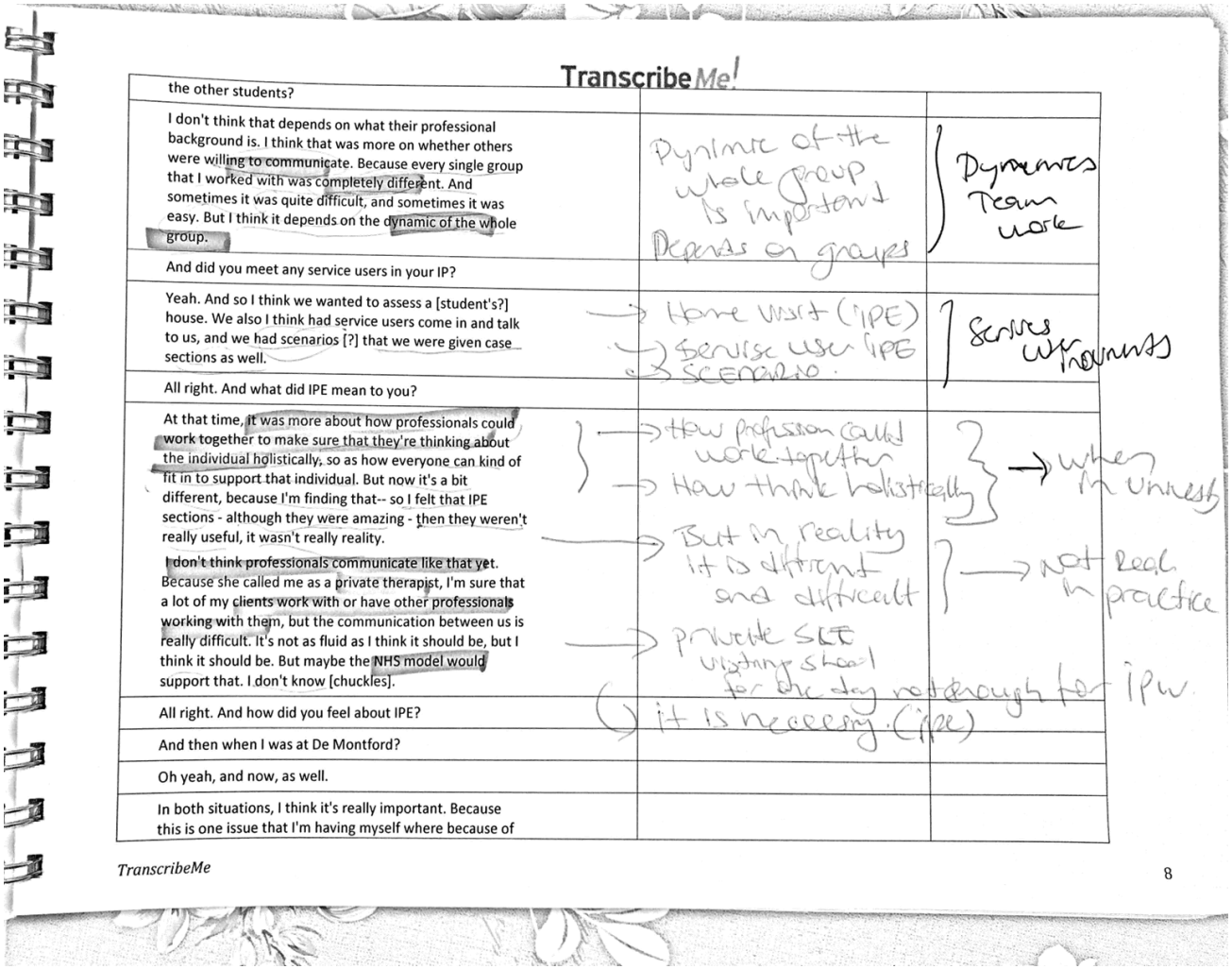
I ensure teachers who are in school are basically have to learn a bit about how school works and all of the other challenges teachers and teaching assistants face. And [?] for the teachers at the moment only be stressed out about the curriculum and all of that. So being aware of all of that to make sure that the [?] that I put in place don't stress them even further.	Knowing something about the curriculum be aware of the education system	knowing others ways of works
So they put out 45 of you in a classroom in the basement and I combine strategy for the teachers where they're already maybe stressed about everything else. What relaxes them that could be implemented? Thinking about different ways and also thinking about the case loads of different professionals and things like that.	Reduced the teacher Think different case different professionals	empathy knowing others Problems or stress
Thank you. And now we will pass on to you pre-registration course. Was it in professional education - IPE - part		
of your course?		
Yes.		
And tell me briefly about it. What do you remember?		
So [inaudible] as well. So throughout all four years of said being there, we had different IP sessions. And they were discussing issues with other professionals. I think we had pharmacists, medics, [?], nurses, social workers - and they would always discuss a case, look at a case.	different IPE sessions Discuss the issues with others (Nurse, SW, ph. med.	IPE understand
Where did you do your IPE, in De Montford or Leicester University?.		
I think it was a mixture of De Montford and Leicester. And there was also the community.		
All right. And what other students did you meet - and you gave me I think this answer as well. What type of venue did you meet with them? Do you feel confident or do you feel quite excited - how do you feel then you meet with		



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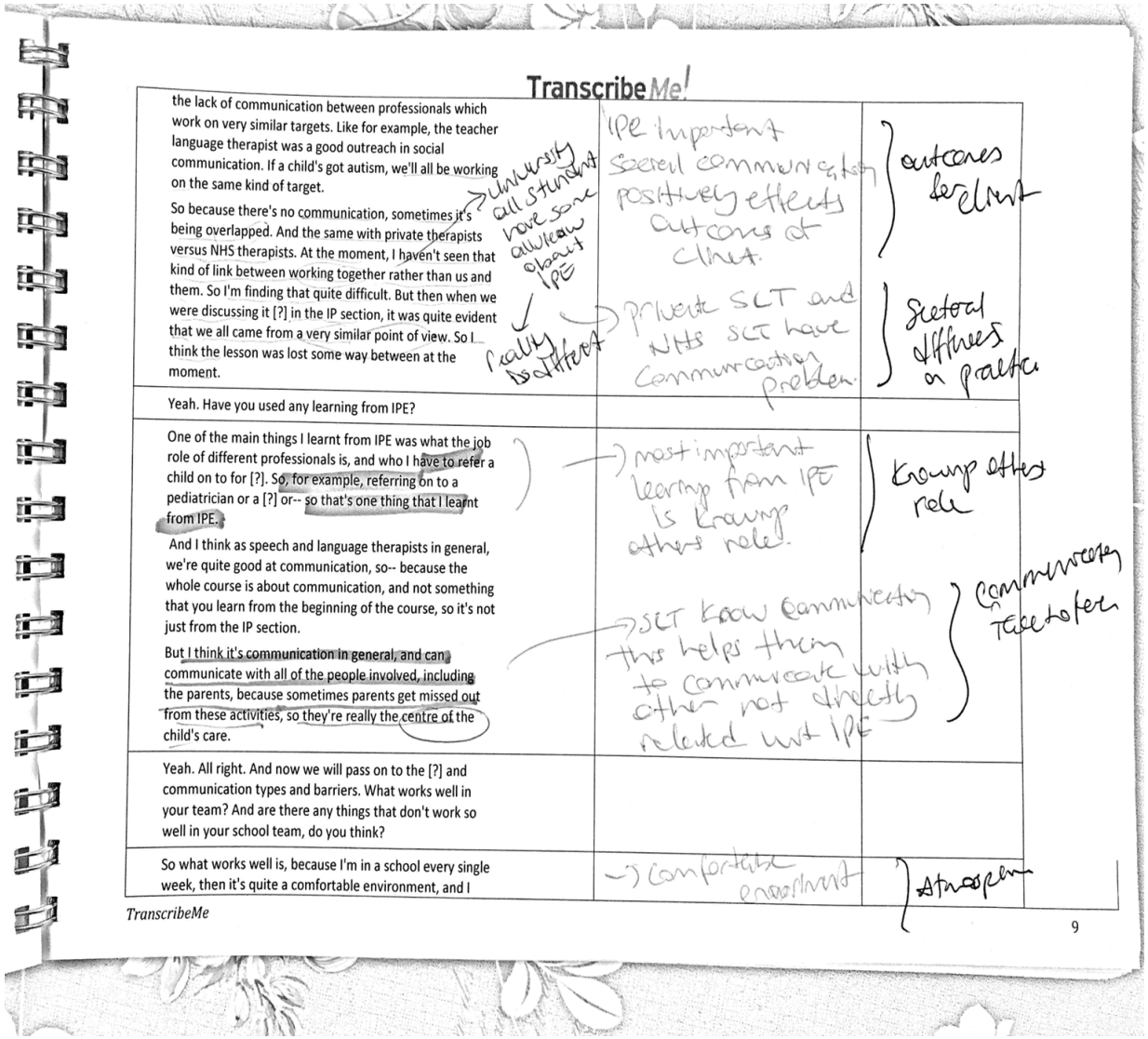
the other students?		
I don't think that depends on what their professional background is. I think that was more on whether others were willing to communicate. Because every single group that I worked with was completely different. And sometimes it was quite difficult, and sometimes it was easy. But I think it depends on the dynamic of the whole group.	Dynamic of the whole group is important Depends on groups	Dynamics Team work
And did you meet any service users in your IP?		
Yeah. And so I think we wanted to assess a [student's?] house. We also I think had service users come in and talk to us, and we had scenarios [?] that we were given case sections as well.	→ Home visit (IPE) → Service user (IPE) → Scenarios.	Service user involvement
All right. And what did IPE mean to you?		
At that time, it was more about how professionals could work together to make sure that they're thinking about the individual holistically, so as how everyone can kind of fit in to support that individual. But now it's a bit different, because I'm finding that-- so I felt that IPE sections - although they were amazing - then they weren't really useful, it wasn't really reality. I don't think professionals communicate like that yet. Because she called me as a private therapist, I'm sure that a lot of my clients work with or have other professionals working with them, but the communication between us is really difficult. It's not as fluid as I think it should be, but I think it should be. But maybe the NHS model would support that. I don't know [chuckles].	→ How profession could work together → How think holistically → But in reality it is different and difficult → private SLT visiting school for the day not enough for IPW	→ when in University → Not real in practice
All right. And how did you feel about IPE?	( ) it is necessary. (IPE)	
And then when I was at De Montford?		
Oh yeah, and now, as well.		
In both situations, I think it's really important. Because this is one issue that I'm having myself where because of		



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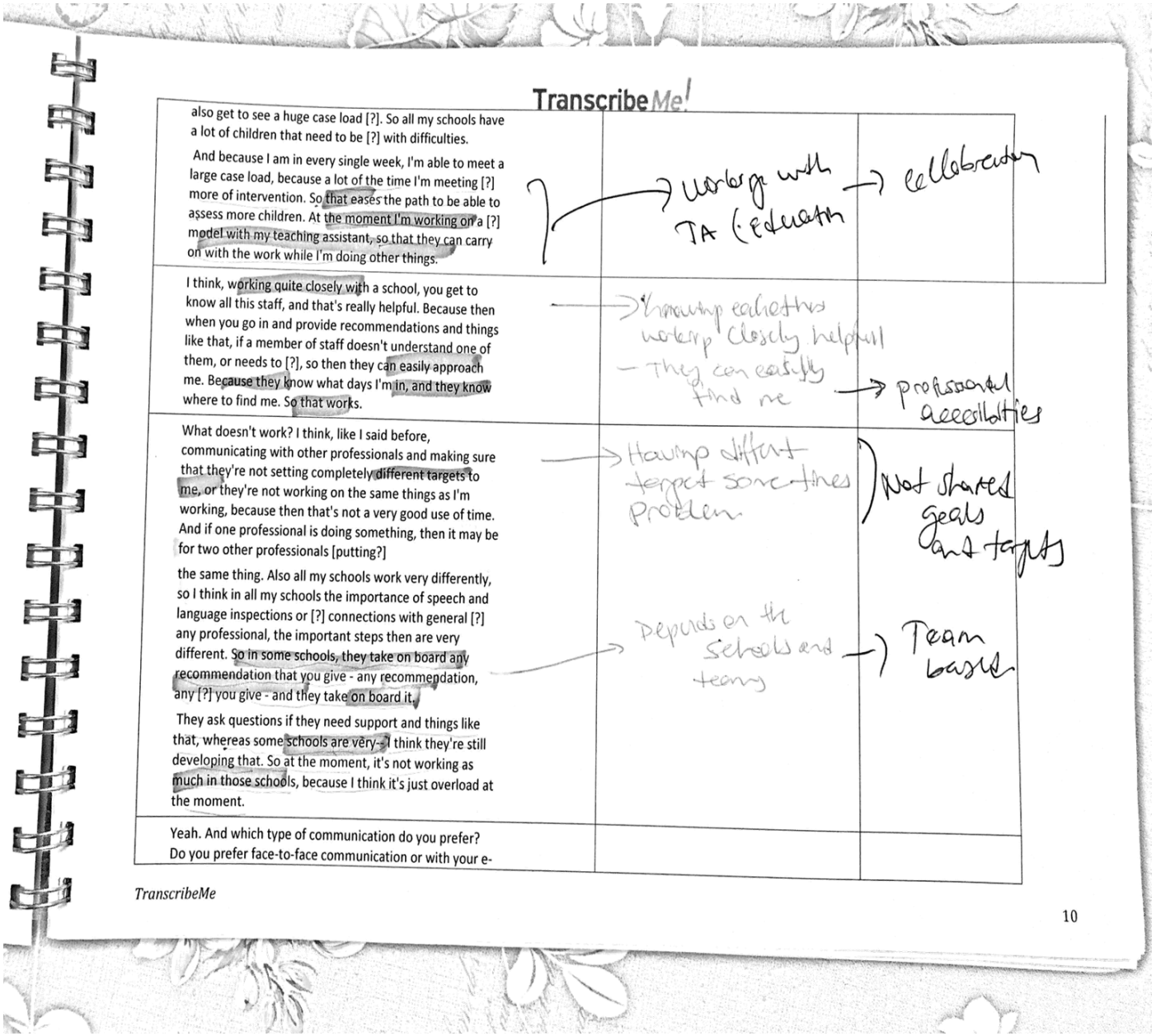
the lack of communication between professionals which work on very similar targets. Like for example, the teacher language therapist was a good outreach in social communication. If a child's got autism, we'll all be working on the same kind of target. So because there's no communication, sometimes it's being overlapped. And the same with private therapists versus NHS therapists. At the moment, I haven't seen that kind of link between working together rather than us and them. So I'm finding that quite difficult. But then when we were discussing it [?] in the IP section, it was quite evident that we all came from a very similar point of view. So I think the lesson was lost some way between at the moment.	IPE important Sectoral communication positively effects outcomes of client. Private SLT and NHS SLT have Communication problem.	outcomes for client Sectoral differences in practice
Yeah. Have you used any learning from IPE?		
One of the main things I learnt from IPE was what the job role of different professionals is, and who I have to refer a child on to for [?]. So, for example, referring on to a pediatrician or a [?] or-- so that's one thing that I learnt from IPE. And I think as speech and language therapists in general, we're quite good at communication, so-- because the whole course is about communication, and not something that you learn from the beginning of the course, so it's not just from the IP section. But I think it's communication in general, and can communicate with all of the people involved, including the parents, because sometimes parents get missed out from these activities, so they're really the centre of the child's care.	most important learning from IPE is knowing others role. SLT know communication this helps them to communicate with other not directly related unit IPE	Knowing others role Communicating Teamwork
Yeah. All right. And now we will pass on to the [?] and communication types and barriers. What works well in your team? And are there any things that don't work so well in your school team, do you think?		
So what works well is, because I'm in a school every single week, then it's quite a comfortable environment, and I	comfortable environment	Atmosphere



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also get to see a huge case load [?]. So all my schools have a lot of children that need to be [?] with difficulties.

And because I am in every single week, I'm able to meet a large case load, because a lot of the time I'm meeting [?] more of intervention. So that eases the path to be able to assess more children. At the moment I'm working on a [?] model with my teaching assistant, so that they can carry on with the work while I'm doing other things.

I think, working quite closely with a school, you get to know all this staff, and that's really helpful. Because then when you go in and provide recommendations and things like that, if a member of staff doesn't understand one of them, or needs to [?], so then they can easily approach me. Because they know what days I'm in, and they know where to find me. So that works.

What doesn't work? I think, like I said before, communicating with other professionals and making sure that they're not setting completely different targets to me, or they're not working on the same things as I'm working, because then that's not a very good use of time. And if one professional is doing something, then it may be for two other professionals [putting?]

the same thing. Also all my schools work very differently, so I think in all my schools the importance of speech and language inspections or [?] connections with general [?] any professional, the important steps then are very different. So in some schools, they take on board any recommendation that you give - any recommendation, any [?] you give - and they take on board it.

They ask questions if they need support and things like that, whereas some schools are very- I think they're still developing that. So at the moment, it's not working as much in those schools, because I think it's just overload at the moment.

Yeah. And which type of communication do you prefer? Do you prefer face-to-face communication or with your e-

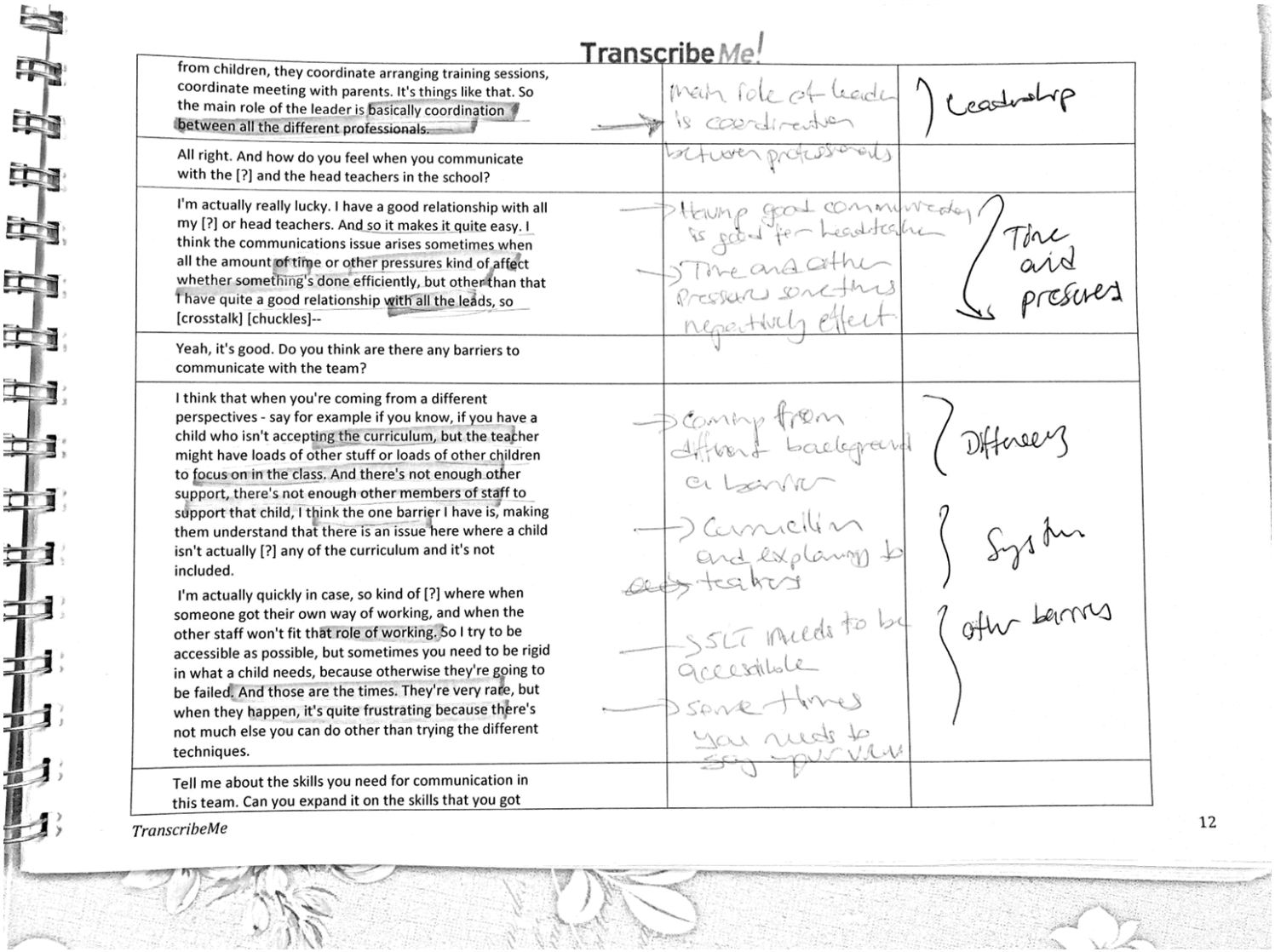
working with TA (education) → collaboration

knowing each other working closely helpful
- they can easily find me → professional accessibility

having different target sometimes problem. → Not shared goals and targets

depends on the schools and teams → Team based

mail, or what kind of communications do you think you prefer with the teams?		
So, a variety. If I'm ever demonstrating or modelling, I prefer face-to-face. If I'm ever recommending anything - providing a new recommendation - I would have face-to-face, because then I can actually physically demonstrate what I mean. I'm a very visual learner, so most things I do are quite visual. And with all of the other kind of admin side of things, I think e-mails are quite good. Because then you've got the track record as well as you're able to send a [?] document, and you're able to prove your time and things like that. So the two main that I do use are e-mail and face-to-face, but I do call up parents now and then as well. So I think those are the three that I use, but the first two are used more than the calling.	→ Face to face Communication for meetings → Email's good for admin side work → calling the parents	) Communication) Communication Types) Communication with clients
All right. And how does leadership work? Tell me about the studies of different people in your teams. How does your role fit in that studies do you think?		
I could hear [crosstalk].		
Sorry about this. How does [crosstalk]-- all right, how does leadership work? Tell me about the studies of the different people in your team.		
So the leadership as in how--?		
Yeah.		
Do I lead or--?		
Oh no, no. The leadership in the team. How does the leadership work in the team?		
So in my team, the leadership would probably be the [?] or the headteacher - depending on the school - and then they speak to you as coordinators. So they're there to kind of coordinate all-- so myself working with the different teaching assistants and getting the referrals	→ Headteacher and SENCO coordinate	) work with



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from children, they coordinate arranging training sessions, coordinate meeting with parents. It's things like that. So the main role of the leader is basically coordination between all the different professionals.	main role of leader is coordination between professionals	Leadership
All right. And how do you feel when you communicate with the [?] and the head teachers in the school?		
I'm actually really lucky. I have a good relationship with all my [?] or head teachers. And so it makes it quite easy. I think the communications issue arises sometimes when all the amount of time or other pressures kind of affect whether something's done efficiently, but other than that I have quite a good relationship with all the leads, so [crosstalk] [chuckles]--	Having good communication is good for headteacher Time and other Pressures sometimes negatively effect	Time and pressures
Yeah, it's good. Do you think are there any barriers to communicate with the team?		
I think that when you're coming from a different perspectives - say for example if you know, if you have a child who isn't accepting the curriculum, but the teacher might have loads of other stuff or loads of other children to focus on in the class. And there's not enough other support, there's not enough other members of staff to support that child, I think the one barrier I have is, making them understand that there is an issue here where a child isn't actually [?] any of the curriculum and it's not included. I'm actually quickly in case, so kind of [?] where when someone got their own way of working, and when the other staff won't fit that role of working. So I try to be accessible as possible, but sometimes you need to be rigid in what a child needs, because otherwise they're going to be failed. And those are the times. They're very rare, but when they happen, it's quite frustrating because there's not much else you can do other than trying the different techniques.	coming from different background a barrier Curriculum and explaining to teachers SSLT needs to be accessible sometimes you needs to say no/ V.V	Differences System other barriers
Tell me about the skills you need for communication in this team. Can you expand it on the skills that you got		

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communicating from the other team members as well?		
So I think one of the main skills is [redacted] being able to explain things in layman's terms. But also understanding other perspectives but understanding the parents, or understanding or talking to teachers about how a child could get through the classroom, or if there's any differences in things like that. Communication as well. I can't remember what Miss [inaudible] said [chuckles].	→ patient → understanding other perspective (parents - professional) → and communication	other perspectives.
All right. That's all right. Is anything you recognise from IPE at university?		
Sorry?		
Is there anything you recognise from IPE at the university? Anything you remember?		
I recognise?		
Yeah, recognise, yeah.		
As in in what way? As in like while working, or--?		
No, at the university. Is there anything you recognise from IPE - inter-professional education, at the university? For example, some people, they remember x and balloons, and some people remember different things. What do you remember?		
Is there anything I remember? I think the main one that the [?] would be when we did [redacted] the community, and we went to an elderly home, and we spoke to the client about [?]-- and then we talked to the client about things that went well and things that didn't go so well, and their access to the community, their access to professionals and things like that. I also remember I think it was [?] about-- was it a pilot? Or there was like an emergency video that we looked at and we discussed.	→ IPE in community elderly home visit Video IPE workshop	community IPE video IPE
Yeah, yeah [laughter]. In-patient safety probably.		
Sorry?		

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In-patient safety workshop probably, you watched it?		
Yeah.		
Yeah.		
I remembered the first few sessions where they were more about kind of team building exercises like the light box and things like that.	→ Team building exercise with, box - light. etc	} Team building
Good. Nice. And what were the difficulties and barriers that you experienced when you were studying IPE at university?		
I think maybe-- so because it was such a wide professional group, sometimes some of the-- because IPE was aimed to access all the different professionals, sometimes the roles for each professional in the cases were very different. So there might have been a case that was very highly medical, and social work, and therapy, but it wasn't very [therapy?]-based, and things like that. So there weren't always cases for all the professionals there. Yeah. I've forgotten the question again.	→ with professionals → roles of professional different → wasn't SLT based cases.	} Different professional roles
Okay. That's all right. And now we will pass on to the [?]. How are decisions reached in your team? In your school team?		
How are the children?		
No. How are decisions reached in your school teams?		
Oh okay. So, if we're thinking about speech and language therapy decisions, they're usually based on some sort of assessment. So, in [?] or foremost [?] observation. And if they're assessment based, then recommendations are usually put in place to help the child on the difficulty that they have - whether it's understanding vocabulary speech, things like that. If it's something more kind of challenging	→ Decisions about the speech on Lang SLT. → Behavioural	} Decision making } Behaviours

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teacher of [?], and then they're kind of made joint with those professionals to see what works best for them in that environment. And then if the referral has been made directly by the parent, then they're quite involved in the decision making process as well. So for example, if a parent is really anxious about their child not speaking in school, because they have [?], then the decisions about the program would be made [?] with their parents.	→	Sometimes parents Decisions depends on parents	Parents involvement
All right. How do you feel about decisions - your team made it?			
So, decisions made by assessment are usually the easier decision made, because they're based on the child's assessment results. And so they're quite factual, and it's quite evident what the child needs, and how best to help that child with that. Decisions made on challenging behaviour and decisions on emotional [?] can be a little bit more difficult, because it's harder to fit those kind of things into the school day. A lot of that involves changing little aspects of the environment - to make incentive things like a reward chart or timetable or things like that which are directly done by myself not directly by the teacher. Different changes in the curriculum that are done by the teacher will be a little bit more difficult.	→	Decisions made by assesment, teaches Children needs Important Different type of Change Some times problem like (curriculum)	Decision making Different Type of challenges
How do you resolve differences of opinion?			
Usually it involves brainstorming different ways in which the targets can be met. I haven't really had huge differences. Usually it's being kind of "Oh, this technique's not working. Can we go back to the drawing board and think of another way that this can work?"	→	Brain storming Changing techniques.	Teacher
Yeah.			
Yeah.			
And tell me how do you feel about working with different professionals in your teams?			

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I'm very comfortable working with the teachers and teaching assistants in my team [?]. Other professional that I've met, I haven't really met any - so I was quite comfortable working with the educational psychologist because you both kind of came from the same perspective. But I know that [?] my colleagues haven't had the same experiences that I have had, so [crosstalk]--	→ Comfortable working with education professionals	working with Education Professionals comfortable.
It depends on the personality and the person you work with.	→ personalities and person dependent.	Personalities
[corsstalk] I have been very lucky.		
Yeah [laughter]. Nice, good I think. It is good. And how you feel about outcomes for the patient and service user, or for the students do you think in that teams?		
Outcome--?		
Yeah, the outcomes of your teams to the students.		
I think it depends on different schools. Like some schools, the schools are really pro-active. I feel that and I really practise in implementing the strategies and asking for help. And I see coming to me and the reviewing and all of that. I think those schools, the outcomes for the child are much better than schools where I'm following a chasing up model. It's just that [?] kind of [ethos?] works for some schools more than other schools. That's just something that I have to get used to.	→ Outcomes of team depends on schools → Helping each other positive outcomes from the others	Teams Team Relationship
All right. Yeah. How do you feel about inter-professional education prepared you for inter-professional collaborative practise do you think?		
Can you say that again?		
Sorry. How well do you feel IPE prepared you for inter-professional practise do you think?		

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I think that it prepared us quite a lot. It is about working together as professionals, and I think it has increased awareness of what different professionals do and what goals are of different professionals and different points of view as well. Because, for example in our discussion, just hearing other points of view, your mind fills up with a lot of different things. I don't know how well I am practising. Just because of the opportunities that I have to relate with other professionals, because I don't have that direct access at the moment. But I think it was useful.	Prepared quite a bit Increased what other professions do what goals other professions have (meeting is useful for sharing perspective)	IPE Prepared Was useful
Yeah. Thank you very much, Emmy. Is there any other point that you want to make?		
About inter-professional--?		
Yeah, about inter-professional working, or IEP, or the whole things about interviews as well.		
I think with inter-professional working, I think that even though it [?] different professionals, as in different roles, like a doctor, a pediatrician, a speech therapist, things like that, it's also quite difficult to come from a private sector, it's also quite difficult to have that inter-professional working with other speech therapists. For example, if I am a chiro-therapist and there's an NHS therapist, and we both got the same chart or case list, it's quite difficult in that sense as well. And I think although it's really important to communicate with all professionals, I think that's also really important, because we're both coming from the same point of view, but if something happens that usually requires NHS it's usually talked with them, which we get with other professionals as well, but it's really important for a speech therapist as a career in general. For people working in therapy it's really important to have that kind of connection involved.	Sectoral difficulties effect IPW Communicating with different professions and different sectors is important	Different sectors effected Different professions and their sectors